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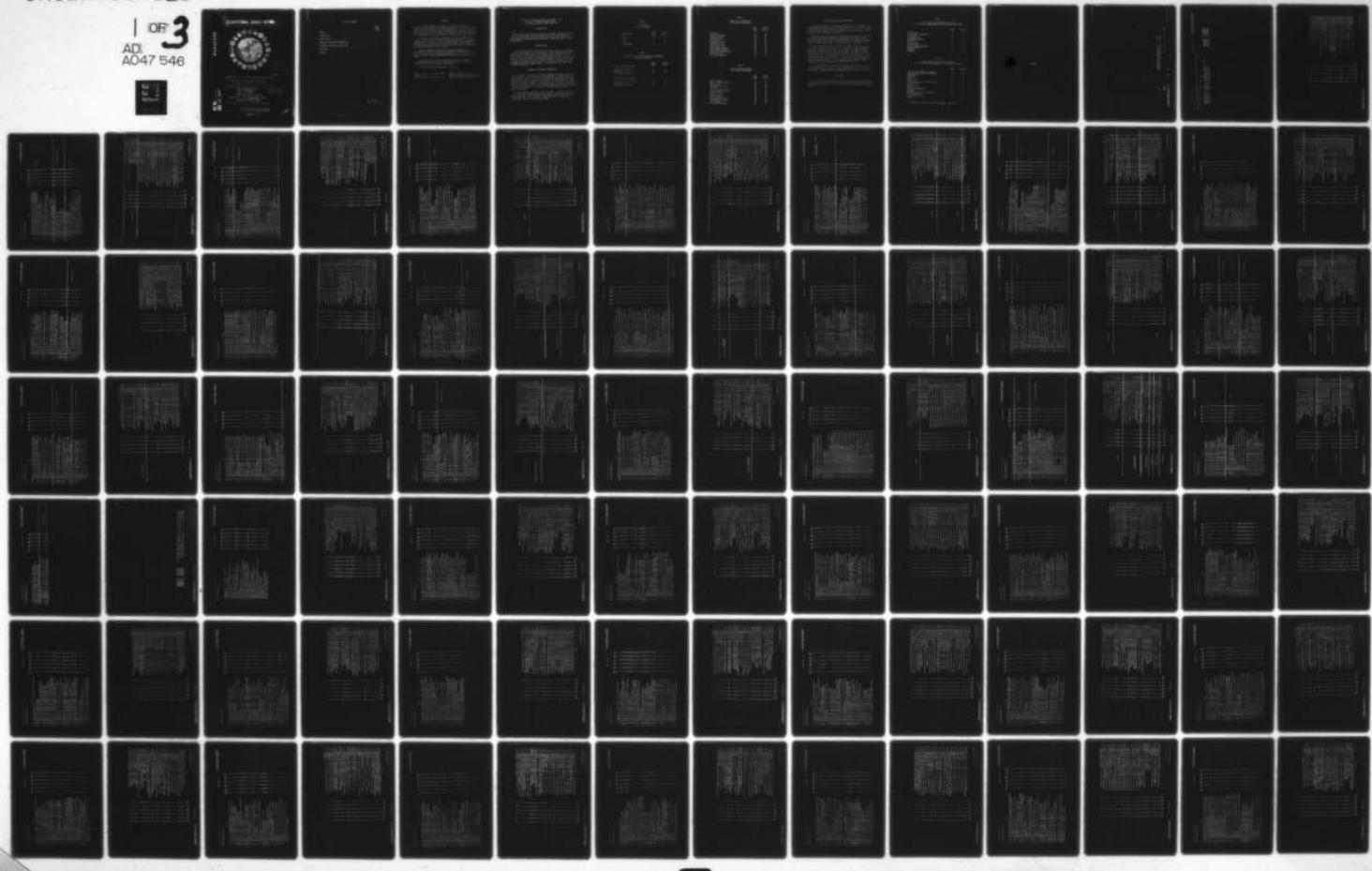
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ELECTRONICS PRINCIPLES OVERSEAS SUPPLEMENT TO THE MISSILE MAINT--ETC(U)
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ELECTRONICS PRINCIPLES OVERSEAS SUPPLEMENT
TO THE MISSILE MAINTENANCE CAREER LADDER
AFSCs 31631L, 31651L, 31671L, AND 31693

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USAF OCCUPATIONAL MEASUREMENT CENTER
LACKLAND AFB TEXAS 78236

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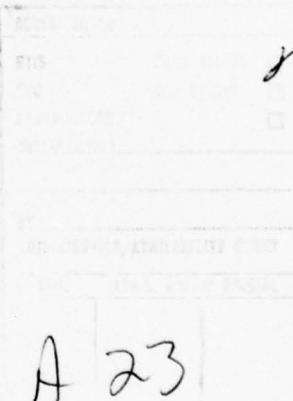
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PREFACE

This report summarizes the results of a survey of Electronics Principles utilized by Missile Maintenance personnel, AFSC 31631L, 31651L, 31671L and 31693, assigned to overseas locations. This report supplements the previous Electronics Principles Occupational Survey Report for the Missile Maintenance Career Ladder, AFPT 90-316-222, dated 5 November 1976, which covered only positions assigned to selected bases within the CONUS.

The Electronics Principles Inventory (EPI) was developed by Major Thomas J. O'Connor and Mr. Hendrick W. Ruck and the survey data were analyzed by Mr. Guy B. Cole. This report has been reviewed and approved by Major Walter F. Kasper, Chief, Operations/Support Career Ladders Analysis Section, Occupational Survey Branch, USAF Occupational Measurement Center, Lackland AF, Texas, 78236.

Computer programs for analyzing the data were designed by Dr. Raymond F. Christal, Occupational and Manpower Research Division, Air Force Human Resources Laboratory (AFHRL), and were written by the Project Analysis and Programming Branch, Computational Sciences Division, AFHRL.

Distribution of this report is made upon request to the USAF Occupational Measurement Center, attention of the Chief, Occupational Survey Branch (OMY), Lackland AFB, Texas 78236.

This report has been reviewed and is approved.

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ELECTRONICS PRINCIPLES OVERSEAS SUPPLEMENT TO THE
MISSILE MAINTENANCE CAREER LADDER
AFSCs 31631L, 31651L, 31671L, AND 31693

INTRODUCTION

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This report summarizes the results of an Electronics Principles survey of Missile Maintenance personnel assigned overseas and supplements the EPI report for the Missile Maintenance career ladder (AFPT 90-316-222, dated 5 November 1976) which was restricted to a selected sample of CONUS personnel. ↴

ADMINISTRATION

The inventory booklet used in this survey was identical to that used in collection of data for the CONUS report. Consolidated base personnel offices in operational units overseas received the inventory booklets for administration to incumbents holding DAFSCs 316X1L and 31693. Survey administration was accomplished between 9 November 1976 and 8 February 1977. Completed survey booklets were received from 280 incumbents or 75 percent of the 375 personnel assigned to overseas locations, as reflected on the September 1976 Uniform Airman Record. The following results were based on those responses.

SUMMARY OF BACKGROUND INFORMATION

There were no significant differences between background information items reported for CONUS personnel and respondents in overseas jobs. For example, Table 1 shows that 43 percent of the overseas personnel reported that their job was dull compared to 41 percent for CONUS personnel. Additionally, as shown in Table 2, over 60 percent of the overseas respondents reported that their talents and training were used very little or not at all. This was almost identical to responses from CONUS personnel. Table 3 shows very little difference in utilization of test equipment by CONUS and overseas personnel.

Ground equipment operation is shown in Table 4. There were relatively small differences reported between these groups. However, considerably more of the CONUS group operated farm tractors while portable hoists, air compressors (MB-1), and test stands (MUH 32 E/U) were operated by from 17 to 20 percent more of the overseas personnel.

TABLE 1

JOB INTEREST
(PERCENT RESPONDING)

I FIND MY JOB:	<u>CONUS</u> <u>N=202</u>	<u>OVERSEAS</u> <u>N=280</u>
DULL	41	43
SO-SO	27	18
INTERESTING	32	39

TABLE 2

PERCEIVED UTILIZATION OF TALENTS AND TRAINING
(PERCENT RESPONDING)

MY JOB UTILIZES MY TALENTS:	<u>CONUS</u> <u>N=202</u>	<u>OVERSEAS</u> <u>N=280</u>
VERY LITTLE OR NOT AT ALL	63	60
FAIRLY WELL	27	25
QUITE WELL TO PERFECTLY	10	15

MY JOB UTILIZES MY TRAINING:	<u>CONUS</u> <u>N=202</u>	<u>OVERSEAS</u> <u>N=280</u>
VERY LITTLE OR NOT AT ALL	61	63
FAIRLY WELL	30	25
QUITE WELL TO PERFECTLY	9	12

TABLE 3

COMMON TEST EQUIPMENT USED
(20% OR MORE PERFORMING)

	<u>CONUS</u> <u>N=202</u>	<u>OVERSEAS</u> <u>N=280</u>
MULTIMETER	74	74
IGNITER TEST SET	72	68
DIGITAL VOLTMETER	56	63
FREQUENCY METER	54	51
OSCILLOSCOPE	51	63
ALIGNMENT FIXTURE	48	44
POWER SUPPLY (DC)	45	55
ELECTRONIC COUNTER	45	43
POWER SUPPLY (AC)	44	44
AUDIO SIGNAL GENERATOR	40	51
DIFFERENTIAL VOLTMETER	39	49
VACUUM TUBE VOLTMETER (AC)	36	22
DECADE RESISTOR	35	49
RF SIGNAL GENERATOR	26	30

TABLE 4

GROUND EQUIPMENT OPERATED
(20% OR MORE PERFORMING)

	<u>CONUS</u> <u>N=202</u>	<u>OVERSEAS</u> <u>N=280</u>
TRACTOR (FARM)	77	33
MISSILE TRAILER (MHV-12)	73	72
HOIST FIXED	70	69
AIR COMPRESSOR (MCIA)	63	60
FORKLIFT	62	59
TEST STAND (MVH 32 E/U)	59	77
POWER GENERATOR (MD-2)	41	50
BOMB LIFT (MJ-4)	40	42
LIGHTALL (NF-2)	38	45
BOMB LIFT (MJ-1)	37	44
POWER GENERATOR (MD-1)	22	26
AIR COMPRESSOR (MC-2)	22	24
HOIST PORTABLE	21	38
AIR COMPRESSOR (MB-1)	20	40

ELECTRONICS PRINCIPLES APPLICATION

Overseas personnel in this career ladder, like their counterparts in CONUS, employ few electronics principles in their job. Of the 1,257 items in the inventory, only 43 items were answered "yes" by 30 percent or more of the overseas respondents. This contrasts to 34 items answered "yes" by 30 percent or more of the CONUS personnel.

Table 5 shows subject areas with reasonable utilization of electronics principles reflected by respondents to the CONUS and overseas surveys. The electronics principles used by 30 percent or more of both groups were within the same subject areas. The one exception is "antennas", where 30 percent or more of the overseas group marked "yes" to two items.

Slight differences were found between the CONUS and overseas groups concerning subject areas with limited utilization (at least one response marked by 11 percent to 29 percent of the sample). Overseas personnel reflected limited utilization in 14 subject areas, as shown in Table 6. These were the same areas as shown for CONUS personnel except for "antennas" and "electron tubes". Three additional subject areas identified in this category by overseas personnel were: transistors, cable fabrication, and lazers. Significantly, less than 11 percent of the overseas respondents used any principles relating to input/output devices while the CONUS respondents had indicated limited utilization on this duty.

Detailed information concerning percent members marking "yes" to survey items is included in the appendix of this supplementary report. GPSUM1 is a summary of responses by all airmen responding to the survey and by DAFSC groups. GPSUM2 summarizes responses by time in career field groups.

CONCLUSION

Differences in electronics principles application between CONUS and overseas groups within the L shred of the Missile Systems Maintenance career ladder were minor and do not significantly alter the findings of the CONUS report.

TABLE 5

SUBJECT AREAS WITH REASONABLE UTILIZATION
(AT LEAST ONE RESPONSE MARKED BY 30% OR MORE OF THE SAMPLE)

	<u>CONUS</u>	<u>OVERSEAS</u>
MATHEMATICS	X	X
DIRECT CURRENT AND VOLTAGE	X	X
RESISTANCE	X	X
MULTIMETER USES	X	X
ALTERNATING CURRENT	X	X
SOLDERING	X	X
OSCILLOSCOPES	X	X
POWER SUPPLIES	X	X
USE OF SIGNAL GENERATORS	X	X
METER MOVEMENTS	X	X
ANTENNAS		X
INFRARED	X	X

TABLE 6

SUBJECT AREAS WITH LIMITED UTILIZATION
(AT LEAST ONE RESPONSE MARKED BY 11% TO 29% OF THE SAMPLE)

	<u>CONUS</u>	<u>OVERSEAS</u>
INDUCTORS AND INDUCTIVE REACTANCE	X	X
CAPACITORS AND CAPACITIVE REACTANCE	X	X
TRANSFORMERS	X	X
MAGNETISM	X	X
RELAYS	X	X
TRANSISTORS		X
SOLID-STATE SPECIAL PURPOSE DEVICES	X	X
ELECTRON TUBES	X	
COUNTERS	X	X
TIMING CIRCUITS	X	X
MOTORS AND GENERATORS	X	X
ANTENNAS	X	*
WAVEGUIDES AND CAVITY RESONATORS	X	X
CABLE FABRICATION		X
INPUT/OUTPUT DEVICES	X	
LAZERS		X

* Performed by over 30% of the overseas group - see Table 1

APPENDIX

APPENDIX

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AF HUMAN RESOURCES LABORATORY
AIR FORCE SYSTEMS COMMAND

REPORT NUMBER	REPORT ID	REPORT TITLE	TOC	PAGE	1	APPENDIX
1		TABLE OF CONTENTS	TOC		1	
2		PCT MRS PERF TASKS BY DAFSC GRPS	GPSUM1		2	
3		PCT MRS PERF TASKS BY AFMS GRPS	GPSUM2		47	
4		JOBINV	JOBINV		92	
		JOB INVENTORY(DUTY/TASK TITLES)				

FACT HOURS PERFORMED BY DAFSC GROUPS
TABULATION OF PERCENT MEMBERS PERFORMING TASKS AND DUTIES BY DAFSC GROUPS
IN THE 316XIL/93 CANCER FIELD.

REPORTS ON THE FOLLOWING GROUPS WERE REQUESTED

GROUP	IDENTITY	=	SPL001	ALL DS	AIRMEN IN	316XIL/93 CAR FLD	CONTAINING	280 MEMBERS
GROUP	IDENTITY	=	SPL002	ALL DS	AMN DAFSC	31631L	CONTAINING	16 MEMBERS
GROUP	IDENTITY	=	SPL003	ALL DS	AMN DAFSC	31651L	CONTAINING	179 MEMBERS
GROUP	IDENTITY	=	SPL004	ALL DS	AMN DAFSC	31671L	CONTAINING	71 MEMBERS
GROUP	IDENTITY	=	SPL005	ALL DS	AMN DAFSC	31693	CONTAINING	10 MEMBERS

DUTY GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DUTY	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005
	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005
A MATHEMATICS, DIRECT CURRENT, VOLTAGE, AND RESISTANCE	88	88	89	83	80
B MULTIMETER USES, ALTERNATING CURRENT, INDUCTORS, AND CAPACITORS, CAPACITIVE REACTANCE, TRANSFORMERS, AND MAGNETISM	85	81	89	77	70
C RCL CIRCUITS, SERIES AND PARALLEL RESONANCE (TIME CONSTANTS), AND COUPLING, SOLDERING, AND RELAYS	40	44	39	37	60
D MICROPHONES, SPEAKERS, AND OSCILLOSCOPES	55	38	60	52	40
E SEMICONDUCTOR DIODES, TRANSISTORS, AND TRANSISTOR AMPLIFIERS	17	0	13	30	40
F JULIUS STATE, SPECIAL PURPOSE DEVICES, POWER SUPPLIES, AND OSCILLATORS	10	0	8	11	50
G MULTIVIBRATORS, LIMITERS, CLAMPERS, AND ELECTRON TUBES	6	0	3	14	10
H ELECTRON TUBE AMPLIFIERS, HETERODYNING, MODULATION, PURPOSE ELECTRON TUBES, AM SYSTEMS, FM SYSTEMS, AND NUMBERING SYSTEMS	10	13	9	14	0
I LOGIC FUNCTIONS, BOOLEAN EQUATIONS, AND COUNTERS	5	0	4	8	10
J TIMING CIRCUITS, USE OF SIGNAL GENERATORS, MOTORS, AND GENERATORS	24	13	26	24	0
K HETERODYNE, AND GENERATORS, MAGNETIC AMPLIFIERS, AND WAVEWARPING CIRCUITS	54	36	56	52	50
L SINGLE SIDEBAND SYSTEMS, PULSE MODULATION SYSTEMS, AND ANTENNAS	5	56	62	54	40
M TRANSMISSION LENSES, WAVEGUIDES AND CAVITY RESONATORS, AND MICROWAVE AMPLIFIERS AND OSCILLATORS	31	44	39	11	30
N REGISTERS, STORAGE DEVICES, AND DIGITAL TO ANALOG CONVERTERS	26	6	30	24	10
O PHANTASTRONS, SCHMITT TRIGGERS, AND CABLE FABRICATION	16	13	15	20	30
P INPUT/OUTPUT DEVICES, PHOTO SENSITIVE DEVICES, AND SYNCHRONOUS VIBRATIONS	14	19	16	8	10
Q INFRARED, LASERS, AND DISPLAY TUBES	50	69	50	49	30
R PROGRAMMING, DB AND POWER RATIOS	10	6	7	20	20

FACT SHEETS PERFORMED BY DIFFERENT GROUPS
 TASK GROUP SUMMARY
 PERCENT MEMBERS PERFORMING

GPSUM: PAGE 4

AF HUMAN RESOURCES LABORATORY
 AIR FORCE SYSTEMS COMMAND

TASK

	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005
A 1 A1-01 IN YOUR PRESENT JOB, DO YOU USE INSTRUMENTS, SUCH AS MEETERS OR OSCILLOSCOPES, IN WHICH IT IS NECESSARY TO	44	44	50	32	20
A 2 A1-02 DO YOU USE PUBLICATIONS, SUCH AS A TECHNICAL ORDERS OR MAINTENANCE MANUALS, IN WHICH IT IS NECESSARY FOR YOU	24	6	27	25	10
A 3 A1-03 DO YOU REARRANGE AND SOLVE FORMULAS OR EQUATIONS.	13	6	13	14	20
A 4 A1-04 DO YOU CALCULATE THE SQUARE ROOT OF A QUANTITY.	2	0	1	3	10
A 5 A1-05 DO YOU SOLVE FOR UNKNOWN QUANTITIES.	11	13	10	13	20
A 6 A1-06 DO YOU CONVERT NUMBERS TO LOGARITHMS.	0	0	0	0	0
A 7 A1-07 DO YOU USE LOGARITHM TABLES IN ANY TYPE OF CALCULATIONS.	0	0	0	0	10
A 8 A1-08 DO YOU SOLVE QUADRATIC EQUATIONS.	1	0	1	1	0
A 9 A1-09 DO YOU USE THE NATURAL SYSTEM OF LOGARITHMS.	0	0	0	0	0
A 10 A1-10 DO YOU PERFORM CALCULATIONS ON VECTOR QUANTITIES.	1	0	0	3	0
A 11 A1-11 DO YOU WORK WITH TRIGONOMETRIC FUNCTIONS SUCH AS SINE, COSINE, OR TANGENT.	0	0	0	0	0
A 12 A1-12 DO YOU DETERMINE AREAS OF PLANE FIGURES.	1	0	0	1	10
A 13 A1-13 DO YOU SOLVE OR USE SIMULTANEOUS EQUATIONS.	3	0	2	6	0
A 14 A1-14 DO YOU SOLVE OR USE PROPORTIONS.	5	0	5	7	0
A 15 A2-01 DO YOU USE THE TERM VOLTAGE OR VOLT (V).	80	75	82	77	80
A 16 A2-02 DO YOU USE THE TERM ELECTROMOTIVE FORCE (EMF).	18	25	14	27	30
A 17 A2-03 DO YOU USE THE TERM OHM.	80	75	80	80	70
A 18 A2-04 DO YOU USE THE TERM ION.	4	0	7	20	10
A 19 A2-05 DO YOU USE THE TERM DYNE.	3	0	3	0	30
A 20 A2-06 DO YOU USE THE TERM AMPERE.	61	38	59	69	70
A 21 A2-07 DO YOU USE THE TERM NEUTRON.	4	0	3	6	20
A 22 A2-08 DO YOU USE THE TERM COULOMB.	3	0	2	6	10
A 23 A2-09 DO YOU USE THE TERM PROTON.	4	0	2	7	20
A 24 A3-01 DO YOU WORK WITH RESISTORS IN YOUR PRESENT JOB.	41	31	42	46	10
A 25 A3-02 DO YOU INSPECT RESISTORS.	24	13	22	34	20
A 26 A3-03 DO YOU CLEAN RESISTORS.	11	13	9	17	10
A 27 A3-04 DO YOU ADJUST RESISTORS.	37	25	37	42	20
A 28 A3-05 DO YOU CHECK OHMIC VALUE OF RESISTORS.	30	19	27	41	20
A 29 A3-06 DO YOU REMOVE OR REPLACE RESISTORS.	17	6	16	25	20
A 30 A3-07 DO YOU USE OR REFER TO TEMPERATURE COEFFICIENTS FOR RESISTORS OR ANY TASKS YOU PERFORM.	3	0	3	4	0
A 31 A3-08 DO YOU USE OR REFER TO RESISTOR SYMBOLS SUCH AS FIXED RESISTOR SYMBOLS OR TAPPED RESISTOR SYMBOLS.	26	13	20	45	30
A 32 A3-09 DO YOU IDENTIFY OR CLASSIFY THE RESISTORS YOU WORK WITH AS CARBON, FIXED WIRE, SLIDE TAP, RHEOSTAT, OR	25	13	19	41	30
A 33 A3-10 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE OHMIC VALUE OF RESISTANCE.	22	13	18	31	30

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

ITEM/TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005
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A 34 A3-11 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE TOLERANCE, FAILURE RATE.

A 35 A3-12 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE TWO OR MORE BATTERIES MUST BE CONNECTED TOGETHER TO REPRESENT BATTERIES, FUSES, CONDUCTORS, LAMPS, OR SWITCHES

A 36 A3-13 DO YOU MAKE DECISIONS IN WHICH YOU MUST DETERMINE HOW YOU USE OR REFER TO THE SCHEMATIC SYMBOLS WHICH

A 37 A3-14 DO YOU USE OR REFER TO THE SCHEMATIC SYMBOLS WHICH RESISTIVE CIRCUITS.

A 38 A3-15 DO YOU CALCULATE TOTAL RESISTANCE FOR SERIES RESISTIVE CIRCUITS.

A 39 A3-16 DO YOU CALCULATE TOTAL CURRENT FOR SERIES RESISTIVE CIRCUITS.

A 40 A3-17 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROPS FOR SERIES RESISTIVE CIRCUITS.

A 41 A3-18 DO YOU CALCULATE POWER DISSIPATION FOR SERIES RESISTIVE CIRCUITS.

A 42 A3-19 DO YOU CALCULATE TOTAL RESISTANCE FOR SERIES PARALLEL RESISTIVE CIRCUITS.

A 43 A3-20 DO YOU CALCULATE TOTAL CURRENT FOR SERIES PARALLEL RESISTIVE CIRCUITS.

A 44 A3-21 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROPS FOR SERIES PARALLEL RESISTIVE CIRCUITS.

A 45 A3-22 DO YOU CALCULATE INDIVIDUAL BRANCH CURRENTS FOR SERIES PARALLEL RESISTIVE CIRCUITS.

A 46 A3-23 DO YOU CALCULATE POWER DISSIPATION FOR SERIES PARALLEL RESISTIVE CIRCUITS.

A 47 A3-24 DO YOU CALCULATE TOTAL RESISTANCE FOR PARALLEL RESISTIVE CIRCUITS.

A 48 A3-25 DO YOU CALCULATE TOTAL CURRENT FOR PARALLEL RESISTIVE CIRCUITS.

A 49 A3-26 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROPS FOR PARALLEL RESISTIVE CIRCUITS.

A 50 A3-27 DO YOU CALCULATE INDIVIDUAL BRANCH CURRENTS FOR PARALLEL RESISTIVE CIRCUITS.

A 51 A3-28 DO YOU CALCULATE POWER DISSIPATION FOR PARALLEL RESISTIVE CIRCUITS.

B 52 B1-01 DO YOU MEASURE RESISTANCE.	74	75	79	65	50
B 53 B1-02 DO YOU REPAIR AMMETERS.	3	6	3	3	0
B 54 B1-03 DO YOU MEASURE VOLTAGE.	75	69	81	68	50
B 55 B1-04 DO YOU REPAIR VOLTMETERS.	2	6	2	1	0
B 56 B1-05 DO YOU REPAIR AMMETERS.	2	6	2	1	0
B 57 B1-06 DO YOU MEASURE CURRENT.	45	38	49	39	40
B 58 B1-07 DO YOU USE MULTIMETERS.	77	69	83	70	50
B 59 B1-08 DO YOU DIRECTLY USE A QUANTITY OF CHARGE CALLED A COULOMB.	1	0	1	0	0
B 60 B1-09 DO YOU READ SCHEMATICS.	54	31	52	63	60

TASK GROUP SUMMARY
PARTICIPATING MEMBERS PERTH FORUM

		SPL 001	SPL 002	SPL 003	SPL 004	SPL 005
B 61 B2-01	DO YOU USE OR REFER TO THE TERM EFFECTIVE VOLTAGE (IRMS).	38	19	35	45	60
B 62 B2-02	DO YOU USE OR REFER TO THE TERM PEAK TO PEAK VOLTAGE.	44	25	45	44	70
B 63 B2-03	DO YOU USE OR REFER TO THE TERM AVERAGE VOLTAGE (DC).	39	31	40	38	60
B 64 B2-04	DO YOU USE OR REFER TO THE TERM WAVE LENGTH.	31	13	35	24	60
B 65 B2-05	DO YOU USE OR REFER TO THE TERM FREQUENCY.	63	25	65	65	70
B 66 B2-06	DO YOU USE OR REFER TO THE TERM INSTANTANEOUS VALUE.	10	0	9	14	20
B 67 B3-01	DO YOU WORK WITH INDUCTORS OR CIRCUITS CONTAINING INDUCTORS, CHOSES, OR CHOKE COILS IN YOUR PRESENT JOB.	11	0	11	13	20
B 68 B3-02	DO YOU INSPECT INDUCTORS.	7	6	6	8	10
B 69 B3-03	DO YOU CLEAN INDUCTORS.	4	0	4	2	0
B 70 B3-04	DO YOU ADJUST INDUCTORS.	5	0	4	6	10
B 71 B3-05	DO YOU REMOVE OR REPLACE INDUCTORS.	5	6	4	6	10
B 72 B3-06	DO YOU USE OR REFER TO INDUCTANCE.	4	0	5	7	20
B 73 B3-07	DO YOU USE OR REFER TO亨NRIES.	5	4	4	6	20
B 74 B3-08	DO YOU USE OR REFER TO INDUCTIVE REACTANCE.	5	6	4	6	10
B 75 B3-09	DO YOU USE OR REFER TO COPPER LOSS IN INDUCTORS.	0	0	1	0	0
B 76 B3-10	DO YOU USE OR REFER TO HYSTERESIS LOSS IN INDUCTORS.	1	0	1	3	0
B 77 B3-11	DO YOU USE OR REFER TO EDDY CURRENT LOSS IN INDUCTORS.	1	0	1	1	0
B 78 B3-12	DO YOU USE OR REFER TO THE GENERAL RULE THAT INDUCTANCE IS PROPORTIONAL TO THE NUMBER OF COILS.	1	0	1	0	10
B 79 B3-13	DO YOU USE OR REFER TO THE GENERAL RULE THAT THE IN- DUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE CROSS SECTIONAL AREA OF THE COIL.	0	0	0	0	0
B 80 B3-14	DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS INVERSELY PROPORTIONAL TO ITS INDUCTANCE.	0	0	1	0	0
B 81 B3-15	DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE NUMBER OF COILS.	0	0	0	0	0
B 82 B3-16	DO YOU CALCULATE INDUCTANCE FOR PARTICULAR INDUCTORS USING FORMULAS.	0	0	1	0	0
B 83 B3-17	DO YOU CALCULATE THE TOTAL INDUCTANCE FOR INDUCTORS IN SERIES.	1	0	1	1	0
B 84 B3-18	DO YOU CALCULATE THE TOTAL INDUCTANCE FOR INDUCTORS IN PARALLEL.	1	0	1	1	0
B 85 B3-19	DO YOU CALCULATE THE TOTAL INDUCTANCE FOR INDUCTORS IN SERIES-PARALLEL CIRCUITS.	1	0	1	1	0
B 86 B3-20	DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT LAGS VOLTAGE IN AC INDUCTOR CIRCUITS.	1	0	1	3	0
B 87 B3-21	DO YOU CALCULATE INDUCTIVE REACTANCE.	1	0	1	3	0
B 88 B3-22	DO YOU USE OR REFER TO THE GENERAL RULE THAT INDUCTIVE REACTANCE IS DIRECTLY PROPORTIONAL TO FREQUENCY.	1	0	0	3	10
B 89 B3-23	DO YOU WORK WITH POWER INDUCTORS.	3	0	3	6	0
B 90 B3-24	DO YOU WORK WITH AUDIO FREQUENCY INDUCTORS.	3	0	2	6	10
B 91 B3-25	DO YOU WORK WITH RADIO FREQUENCY INDUCTORS.	3	0	3	4	10

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

D-Y-TSK	SPL			SPL			SPL		
	001	002	003	004	005	006	007	008	009
C 121 C1-30 DO YOU WORK WITH ROTOR-STATOR (VARIABLE) CAPACITORS	6	6	5	10	10	10	10	10	10
C 122 C1-31 DO YOU WORK WITH COMPRESSOR (TRIMMER) CAPACITORS	4	0	3	4	10				
C 123 C1-32 DO YOU WORK WITH ELECTROLYTIC (FIXED) CAPACITORS	10	0	7	17	30				
C 124 C1-33 DO YOU WORK WITH PAPER (FIXED) CAPACITORS	9	0	7	14	30				
C 125 C1-34 DO YOU WORK WITH MICA (FIXED) CAPACITORS	10	0	7	15	30				
C 126 C1-35 DO YOU WORK WITH CERAMIC (FIXED) CAPACITORS	10	0	7	15	40				
C 127 C1-36 DO YOU WORK WITH DON'T REMEMBER WHICH TYPE OF CAPACITORS	10	0	12	8	0				
C 128 C2-01 DO YOU WORK WITH TRANSFORMERS IN YOUR PRESENT JOB	19	13	15	28	50				
C 129 C2-02 DO YOU INSPECT TRANSFORMERS	13	0	8	24	40				
C 130 C2-03 DO YOU CLEAN TRANSFORMERS	5	0	9	8	10				
C 131 C2-04 DO YOU ADJUST TRANSFORMERS	5	0	5	6	10				
C 132 C2-05 DO YOU TROUBLESHOOT TRANSFORMERS	10	0	7	18	30				
C 133 C2-06 DO YOU REMOVE OR REPLACE COMPLETE TRANSFORMERS	11	0	8	18	40				
C 134 C2-07 DO YOU REMOVE OR REPLACE TRANSFORMER PARTS, SUCH AS THE PRIMARY WINDING	0	0	1	0	0				
C 135 C2-08 DO YOU MAKE A DISTINCTION BETWEEN MUTUAL INDUCTION AND MUTUAL INDUCTANCE (IMI)	0	0	1	0	0				
C 136 C2-09 DO YOU USE THE SYMBOL FOR MUTUAL INDUCTANCE, M	0	0	0	1	0				
C 137 C2-10 DO YOU REFER TO OR USE THE COEFFICIENT OF COUPLING WHEN WORKING WITH TRANSFORMERS	0	0	0	1	0				
C 138 C2-11 DO YOU CALCULATE TURNS RATIOS FOR TRANSFORMERS USING CURRENT OR VOLTAGE RATIOS	1	0	1	1	0				
C 139 C2-12 DO YOU REFER TO REFLECTED IMPEDANCE WHEN WORKING WITH TRANSFORMERS	0	0	0	0	0				
C 140 C2-13 DO YOU CALCULATE IMPEDANCE INTERACTIONS FOR TRANSFORMERS	0	0	0	0	0				
C 141 C2-14 DO YOU WORK WITH AUTO TRANSFORMERS	2	0	1	6	0				
C 142 C2-15 DO YOU WORK WITH POWER TRANSFORMERS	15	6	12	21	50				
C 143 C2-16 DO YOU WORK WITH AUDIO TRANSFORMERS	3	0	1	7	30				
C 144 C2-17 DO YOU WORK WITH RADIO FREQUENCY TRANSFORMERS	4	0	2	4	30				
C 145 C2-18 DO YOU WORK WITH DON'T REMEMBER WHAT TYPE OF TRANSFORMERS	5	6	5	6	0				
C 146 C2-19 DO YOU CHECK TRANSFORMERS FOR OPEN WINDINGS BY MEASURING RESISTANCE	9	0	6	17	30				
C 147 C2-20 DO YOU CHECK TRANSFORMERS FOR SHORTED WINDINGS BY MEASURING RESISTANCE	6	0	6	14	30				
C 148 C2-21 DO YOU CHECK TRANSFORMERS FOR SHORTED WINDINGS BY MEASURING OUTPUT VOLTAGES	7	0	4	14	40				
C 149 C2-22 DO YOU MEASURE RESISTANCE OF TRANSFORMER WINDINGS TO DETERMINE WHETHER A TRANSFORMER HAS A STEP-UP OR	2	0	2	3	0				
C 150 C2-23 DO YOU MEASURE OUTPUT VOLTAGE OF TRANSFORMERS TO DETERMINE WHETHER A TRANSFORMER HAS A STEP-UP OR STEP-DOWN	3	0	3	4	0				
C 151 C2-24 DO YOU REFER TO BASIC TRANSFORMER SCHEMATIC SYMBOLS FOR TRANSFORMERS	14	0	11	21	50				

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DRAFTS

C 152 C2-25 DO YOU REFER TO MULTIPLE SECONDARY-MINDINGS SCHEMATIC SYMBOLS FOR TRANSFORMERS

C 153 C2-26 DO YOU REFER TO MULTIPLE TAP SCHEMATIC SYMBOLS FOR TRANSFORMERS

C 154 C2-27 DO YOU REFER TO CENTER TIP SCHEMATIC SYMBOLS FOR TRANSFORMERS

C 155 C2-28 DO YOU REFER TO AIR CORE SCHEMATIC SYMBOLS FOR TRANSFORMERS

C 156 C2-29 DO YOU REFER TO IRON CORE SCHEMATIC SYMBOLS FOR TRANSFORMERS

C 157 C2-30 DO YOU REFER TO COMBINATIONS OF THE ABOVE SCHEMATIC SYMBOLS FOR TRANSFORMERS

C 158 C2-31 DO YOU DETERMINE PHASE RELATIONSHIPS BETWEEN SECONDARY AND PRIMARY VOLTAGES OF TRANSFORMERS USING

C 159 C2-32 DO YOU DETERMINE OR REFER TO THE TYPE OF CORE IN TRANSFORMERS YOU WORK WITH

C 160 C2-33 DO YOU REFER TO OR USE THE GENERAL RULE THAT THE TURNS RATIO OF A TRANSFORMER IS EQUAL TO THE VOLTAGE RATIO FOR TRANSFORMERS

C 161 C2-34 DO YOU USE OR REFER TO STEP-UP OR STEP-DOWN RATIOS

C 162 C2-35 DO YOU CALCULATE VOLTAGE RATIOS FOR TRANSFORMERS USING TURNS RATIOS

C 163 C2-36 DO YOU CALCULATE CURRENT RATIOS FOR TRANSFORMERS

C 164 C2-37 DOES YOUR JOB INVOLVE ANY TASKS DEALING WITH THREE PHASE TRANSFORMERS

C 165 C2-38 DO YOU INSPECT THREE PHASE TRANSFORMERS

C 166 C2-39 DO YOU CLEAN OR LUBRICATE THREE PHASE TRANSFORMERS

C 167 C2-40 DO YOU ADJUST THREE PHASE TRANSFORMERS

C 168 C2-41 DO YOU TROUBLESHOOT THREE PHASE TRANSFORMERS

C 169 C2-42 DO YOU REMOVE OR REPLACE COMPLETE THREE PHASE TRANSFORMERS

C 170 C2-43 DO YOU REMOVE OR REPLACE THREE PHASE TRANSFORMER PARTS SUCH AS WINDINGS

C 171 C2-44 DO YOU USE OR REFER TO PERMANENT MAGNETS

C 172 C3-02 DO YOU USE OR REFER TO TEMPORARY MAGNETS

C 173 C3-03 DO YOU USE OR REFER TO RETENTIVITY OF MAGNETIC MATERIALS

C 174 C3-04 DO YOU USE OR REFER TO RELUCTANCE OF MAGNETIC MATERIALS

C 175 C3-05 DO YOU USE OR REFER TO PERMEABILITY OF MAGNETIC MATERIALS

C 176 C3-06 DO YOU USE OR REFER TO RESIDUAL MAGNETISM

C 177 C3-07 DO YOU USE OR REFER TO MAGNETIC LINES OF FORCE OR FLUX

*C 178 C3-08 DO YOU USE OR REFER TO MICHAELIS THEORY OF MAGNETISM

SPL 001	SPL 002	SPL 003	SPL 004	SPL 005
9	0	6	14	50
10	0	6	17	50
12	0	7	21	50
7	0	5	8	40
2	0	2	3	20
8	0	5	11	50
2	0	1	3	20
7	0	4	13	50
2	0	1	4	0
5	0	2	10	20
1	0	1	3	0
1	0	1	3	0
7	0	6	14	10
6	0	4	14	10
1	0	1	3	0
4	0	3	7	0
3	0	1	8	0
2	0	2	7	0
0	0	0	0	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		SPL 001	SPL 002	SPL 003	SPL 004	SPL 005
D Y = 15A						
C 179 C3-09	DO YOU USE OR REFER TO DOMAIN THEORY OF MAGNETISM	0	0	0	0	0
C 180 C3-10	DO YOU USE OR REFER TO MAGNETIC INDUCTION	5	6	2	8	20
C 181 C3-11	DO YOU USE OR REFER TO FLUX DENSITY	1	0	1	3	10
C 182 C3-12	DO YOU USE OR REFER TO THE GENERAL RULE THAT FOR MAGNETIC POLES, LIKE POLES REPEL, AND UNLIKE POLES ATTRACT	15	13	12	20	40
C 183 C3-13	DO YOU USE THE LEFT HAND THUMB RULE TO FIND THE DIRECTION OF MAGNETIC FIELDS ABOUT STRAIGHT WIRES	4	13	3	3	10
C 184 C3-14	DO YOU USE THE LEFT HAND THUMB RULE TO FIND THE NORTH POLE OF A CURRENT CARRYING COIL	2	0	1	3	10
D 185 DI-01	DO YOU WORK WITH RCL, LR, RCL CIRCUITS IN YOUR PRESENT JOB	5	0	4	6	20
D 186 DI-02	DO YOU USE OR REFER TO VECTORS WHEN WORKING WITH RCL CIRCUITS	0	0	0	0	10
D 187 DI-03	DO YOU USE OR REFER TO PYTHAGOREAN THEOREM WHEN WORKING WITH RCL CIRCUITS	0	0	0	0	0
D 188 DI-04	DO YOU USE OR REFER TO SINE WHEN WORKING WITH RCL CIRCUITS	0	0	0	0	0
D 189 DI-05	DO YOU USE OR REFER TO COSINE WHEN WORKING WITH RCL CIRCUITS	0	0	0	0	0
D 190 DI-06	DO YOU USE OR REFER TO TANGENT WHEN WORKING WITH RCL CIRCUITS	0	0	0	0	0
D 191 DI-07	DO YOU USE OR REFER TO WATTS WHEN WORKING WITH RCL CIRCUITS	1	0	1	1	20
D 192 DI-08	DO YOU USE OR REFER TO TRUE POWER (PT) WHEN WORKING WITH RCL CIRCUITS	0	0	0	0	10
D 193 DI-09	DO YOU USE OR REFER TO MAXIMUM POWER (PM) WHEN WORKING WITH RCL CIRCUITS	1	0	1	1	10
D 194 DI-10	DO YOU USE OR REFER TO AVERAGE POWER (PAVE) WHEN WORKING WITH RCL CIRCUITS	1	0	0	1	20
D 195 DI-11	DO YOU USE OR REFER TO APPARENT POWER (PA) WHEN WORKING WITH RCL CIRCUITS	1	0	1	0	10
D 196 DI-12	DO YOU USE OR REFER TO POWER FACTOR (PF) WHEN WORKING WITH RCL CIRCUITS	0	0	0	0	0
D 197 DI-13	DO YOU USE OR REFER TO RESONANT CIRCUITS WHEN WORKING WITH RCL CIRCUITS	2	0	1	4	0
D 198 DI-14	DO YOU USE OR REFER TO BANDWIDTH WHEN WORKING WITH RCL CIRCUITS	2	0	2	3	10
D 199 DI-15	DO YOU USE OR REFER TO SELECTIVITY WHEN WORKING WITH RCL CIRCUITS	2	0	2	3	10
D 200 DI-16	DO YOU USE OR REFER TO RESONANT FREQUENCY WHEN WORKING WITH RCL CIRCUITS	2	0	2	4	10
D 201 DI-17	DO YOU USE OR REFER TO HALF POWER POINTS WHEN WORKING WITH RCL CIRCUITS	0	0	1	0	0
D 202 DI-18	DO YOU USE OR REFER TO HANDPASS REGION WHEN WORKING WITH RCL CIRCUITS	1	0	1	3	10
D 203 DI-19	DO YOU USE OR REFER TO CIRCUIT Q WHEN WORKING WITH RCL CIRCUITS	1	0	0	3	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

OBJECTIVE	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005
U 204 D1-20 DO YOU USE OR REFER TO TANK CIRCUITS WHEN WORKING WITH RCL CIRCUITS	2	0	2	4	10
D 205 D1-21 DO YOU DETERMINE VALUES OF TRIGONOMETRIC FUNCTIONS USING FORMULAS	0	0	0	0	0
U 206 D1-22 DO YOU DRAW VOLTAGE, CURRENT, OR IMPEDANCE VECTOR DIAGRAMS FOR CIRCUITS	0	0	1	0	0
U 207 D1-23 DO YOU CALCULATE TOTAL IMPEDANCE FOR CAPACITIVE CIRCUITS	1	0	1	1	0
D 208 D1-24 DO YOU CALCULATE PHASE ANGLES BETWEEN IMPEDANCE AND RESISTANCE IN CAPACITIVE CIRCUITS	0	0	0	0	0
D 209 D1-25 DO YOU CALCULATE TOTAL IMPEDANCE FOR SERIES RCL CIRCUITS	1	0	1	1	0
D 210 D1-26 DO YOU CALCULATE IMPEDANCE ANGLES FOR SERIES RCL CIRCUITS	0	0	1	0	0
D 211 D1-27 DO YOU CALCULATE APPARENT POWER (PA) FOR SERIES RCL CIRCUITS	1	0	1	0	10
D 212 D1-28 DO YOU CALCULATE TRUE POWER (PT) FOR SERIES RCL CIRCUITS	0	0	1	0	0
D 213 D1-29 DO YOU CALCULATE POWER FACTORS (PF) FOR SERIES RCL CIRCUITS	0	0	1	0	0
D 214 D1-30 DO YOU CALCULATE TOTAL CURRENT FOR PARALLEL RCL CIRCUITS	1	0	1	1	10
U 215 D1-31 DO YOU CALCULATE IMPEDANCE ANGLES FOR PARALLEL RCL CIRCUITS	0	0	0	0	0
D 216 D1-32 DO YOU CALCULATE TOTAL IMPEDANCE FOR PARALLEL RCL CIRCUITS USING THE ASSUMED VOLTAGE METHOD	0	0	0	0	0
D 217 D1-33 DO YOU CALCULATE TOTAL IMPEDANCE FOR PARALLEL RCL CIRCUITS USING OHM'S LAW	1	0	1	1	10
D 218 D1-34 DO YOU CHECK CAPACITORS USING OMMETERS	2	0	2	3	0
D 219 D1-35 DO YOU CHECK CAPACITORS USING SUBSTITUTION	2	0	2	4	10
D 220 D1-36 DO YOU CHECK INDUCTORS USING OMMETERS	1	0	2	1	0
D 221 D1-37 DO YOU CHECK INDUCTORS USING SUBSTITUTION	1	0	1	4	0
D 222 D1-38 DO YOU USE OR REFER TO THE GENERAL RULE THAT THETA = 0°, PF = 1, AND PA = PT FOR RESONANT CIRCUITS	0	0	0	0	0
D 223 D1-39 DO YOU CALCULATE RESONANT FREQUENCIES FOR RCL CIRCUITS	0	0	1	0	0
D 224 D1-40 DO YOU USE OR REFER TO THE GENERAL RULE THAT IMPEDANCE IS MINIMUM AND CURRENT MAXIMUM AT THE RESONANT FREQUENCY	1	0	1	3	0
D 225 D1-41 DO YOU USE OR REFER TO THE GENERAL RULE THAT LINE CURRENT IS MINIMUM AND IMPEDANCE MAXIMUM AT RESONANT FREQUENCY	1	0	1	1	0
D 226 D1-42 DO YOU USE OR REFER TO THE GENERAL RULE THAT HALF POWER POINTS ARE AT 70.7 PERCENT OF THE PEAK CURRENT VALUE	1	0	1	1	10
D 227 D1-43 DO YOU USE OR REFER TO THE GENERAL RULE THAT BANDWIDTH IS INVERSELY PROPORTIONAL TO	1	0	1	1	0
D 228 D1-44 DO YOU DETERMINE HOW CHANGES IN FREQUENCY, RESISTANCE, CAPACITANCE, OR INDUCTANCE WILL AFFECT CURRENT OR PHASE	0	3	0	0	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMED

D-15A

		SPL DOI	SPL DOI	SPL DOI	SPL DOI	SPL DOI
D 229	D2-Q1 IN YOUR PRESENT JOB, DO YOU WORK WITH, USE, OR REFER TO SERIES OR PARALLEL RESONANT CIRCUITS OR TIME CONSTANTS	3	0	2	4	30
D 230	D2-Q2 DO YOU WORK WITH, USE, OR REFER TO TIME CONSTANTS	3	0	1	4	30
D 231	D2-Q3 DO YOU WORK WITH, USE, OR REFER TO AVAILABLE VOLTAGE	1	0	1	10	
D 232	D2-Q4 DO YOU WORK WITH, USE, OR REFER TO TRANSIENT INTERVALS	1	0	1	0	10
D 233	D2-US DO YOU USE OR REFER TO THE GENERAL RULE THAT A CAPACITOR IS FULLY CHARGED (OR DISCHARGED) AFTER FIVE (5) TIME CONSTANTS OR CONSTANT CHARTS	2	0	0	3	30
D 234	D2-06 DO YOU USE OR REFER TO UNIVERSAL TIME CONSTANT CHARTS	1	0	0	1	10
D 235	D2-07 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE CIRCUIT CURRENT OR COMPONENT VOLTAGES AFTER A SPECIFIC TIME REQUIRED FOR CIRCUIT CURRENT OR COMPONENT VOLTAGES TO	0	0	0	0	10
D 236	D2-08 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE THE TIME REQUIRED FOR CIRCUIT CURRENT OR COMPONENT VOLTAGES TO	0	0	0	0	10
D 237	D2-09 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE COMPONENT VALUES REQUIRED FOR CIRCUIT CURRENT AND	0	0	0	0	10
D 238	D2-10 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT IN LR CIRCUITS REACHES 113 MILLIAMP VALUE (OR ZERO) AFTER	1	0	0	0	30
D 239	D3-Q1 DO YOU WORK WITH CIRCUITS USED AS FILTERS IN YOUR PRESENT JOB	5	0	3	7	20
D 240	D3-Q2 DO YOU INSPECT FILTER CIRCUITS	4	0	3	6	10
D 241	D3-Q3 DO YOU CLEAN FILTER CIRCUITS	2	0	2	3	10
D 242	D3-Q4 DO YOU ALIGN OR ADJUST FILTER CIRCUITS	2	0	2	3	10
D 243	D3-US DO YOU TROUBLESHOOT TO THE FILTER CIRCUIT LEVEL	2	0	2	1	20
D 244	D3-Q6 DO YOU TROUBLESHOOT TO COMPONENT PARTS	2	0	2	3	20
D 245	D3-Q7 DO YOU REMOVE OR REPLACE THE COMPLETE FILTER CIRCUIT	4	0	2	7	20
D 246	D3-Q8 DO YOU REMOVE OR REPLACE FILTER CIRCUIT COMPONENT PARTS	2	0	2	3	20
D 247	D3-Q9 DO YOU WORK WITH LOW PASS FILTERS	1	0	1	1	10
D 248	D3-Q10 DO YOU WORK WITH HIGH PASS FILTERS	1	0	1	1	10
D 249	D3-Q11 DO YOU WORK WITH BANDPASS FILTERS	1	0	1	3	10
D 250	D3-Q12 DO YOU WORK WITH BAND-REJECT FILTERS	1	0	1	1	10
D 251	D3-Q13 DON'T REMEMBER WHICH TYPE OF FILTER YOU WORK WITH	3	0	2	4	20
D 252	D3-Q14 DO YOU WORK WITH L-SECTION FILTER CONFIGURATION	1	0	1	3	0
D 253	D3-Q15 DO YOU WORK WITH T-SECTION FILTER CONFIGURATION	1	0	1	3	0
D 254	D3-Q16 DO YOU WORK WITH PI-SECTION FILTER CONFIGURATION	1	0	1	3	0
D 255	D3-Q17 DON'T REMEMBER WHICH TYPE FILTER CONFIGURATION	3	0	2	3	30
D 256	D3-Q18 DO THE FILTERS YOU WORK WITH USE PARALLEL RESONANT CIRCUITS	2	0	1	4	10
D 257	D3-Q19 DO THE FILTERS YOU WORK WITH USE SERIES-PARALLEL CIRCUITS	2	0	1	4	10
D 258	D3-Q20 DO THE FILTERS YOU WORK WITH USE SERIES RESONANT CIRCUITS	2	0	1	3	10

TASK GROUP SUMMARY
PERCENT HOURS PERFORMED

QUESTION	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005
E 259 D3-21 DON'T REMEMBER WHICH TYPE OF BASIC CIRCUIT	2	0	1	3	20
E 260 D3-22 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE	0	0	0	0	0
<u>CAPACITANCE OR INDUCTANCE VALUES REQUIRED FOR SPECIFIC</u>					
E 261 EI-01 DO YOU WORK WITH COUPLING DEVICES IN YOUR PRESENT JOB	4	0	2	6	20
E 262 EI-02 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO	4	0	2	6	20
THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH RC					
E 263 EI-03 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO	2	0	2	3	20
THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH					
E 264 EI-04 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO	3	0	1	7	20
THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH					
E 265 EI-05 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS	2	0	2	3	10
WHICH PERFORM RC COUPLING					
E 266 EI-06 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS	2	0	2	3	10
WHICH PERFORM IMPEDANCE COUPLING					
E 267 EI-07 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS	2	0	1	4	0
WHICH PERFORM TRANSFORMER COUPLING					
E 268 EI-08 DO YOU WORK WITH DIRECTLY COUPLED CIRCUITS	2	0	1	3	20
E 269 EI-09 DO YOU WORK WITH CAPACITIVE-RESISTIVE COUPLED	2	0	1	3	20
CIRCUITS					
E 270 EI-10 DO YOU WORK WITH CAPACITIVE-INDUCTIVE COUPLED	2	0	1	3	20
CIRCUITS					
E 271 EI-11 DO YOU WORK WITH TRANSFORMER COUPLED CIRCUITS	2	0	1	4	20
E 272 EI-12 DON'T REMEMBER WHICH TYPE OF COUPLING CIRCUITS	1	0	2	1	0
E 273 EI-01 IN YOUR PRESENT JOB DO YOU PERFORM SOLDERING	35	6	35	44	40
TECHNIQUES OR INSPECT OR EVALUATE SOLDERED CONNECTIONS					
E 274 EI-02 DO YOU SELECT TYPE OF SOLDER TO USE	27	6	27	30	30
E 275 EI-03 DO YOU ADD FLUX TO CONNECTIONS	26	6	26	30	20
E 276 EI-04 DO YOU CLEAN CONNECTIONS USING SOLVENTS	26	6	28	24	20
E 277 EI-05 DO YOU STRIP INSULATION FROM WIRES	32	6	34	35	30
E 278 EI-06 DO YOU CONNECT OR DISCONNECT HEAT SINKS	21	6	19	30	30
E 279 EI-07 DO YOU BEND OR SHAPE WIRES OR LEADS	30	6	31	34	30
E 280 EI-08 DO YOU CUT WIRES	31	6	32	34	30
E 281 EI-09 DO YOU FILE OR SHAPE SOLDERING IRON TIPS	25	6	25	32	10
E 282 EI-10 DO YOU TIN SOLDERING IRON TIPS	27	6	26	35	30
E 283 EI-11 DO YOU CLEAN SOLDERING IRON TIPS	30	6	31	35	30
E 284 EI-12 DO YOU CLEAN ELECTRICAL SURFACES USING ERASERS	22	6	21	30	20
E 285 EI-13 DO YOU TIN OR PRE-TIN CONDUCTORS	22	6	18	35	30
E 286 EI-14 DO YOU INSPECT SOLDERED CONNECTIONS	31	6	28	42	40
E 287 EI-15 DO YOU DESOLDER CONNECTIONS BY WICKING	16	6	15	23	0
E 288 EI-16 DO YOU DESOLDER CONNECTIONS USING VACUUM DESOLDERING	5	6	4	8	10
TOOLS					
E 289 EI-17 DO YOU CUT COMPONENT LEADS TO REMOVE COMPONENTS	18	6	16	24	30
E 290 EI-18 DO YOU CRUSH COMPONENTS FOR REMOVAL	4	6	4	1	0

FACT MHS PERFORM TASKS BY DAFSC GROUP
TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

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AF HUMAN RESOURCES LABORATORY
AIR FORCE SYSTEMS COMMAND

BY TASK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005
E 291 E2-19 DO YOU MAKE HARDWIRE CONNECTIONS	25	0	23	35	30
E 292 E2-20 DO YOU MAKE PRINTED CIRCUIT BOARD CONNECTIONS	13	6	12	18	10
E 293 E2-21 DO YOU SOLDER PASSIVE COMPONENTS SUCH AS RESISTORS OR CAPACITORS ON PRINTED CIRCUIT BOARDS	9	6	8	13	10
E 294 E2-22 DO YOU SOLDER ACTIVE COMPONENTS SUCH AS SOLID-STATE DIODES OR TRANSISTORS ON PRINTED CIRCUIT BOARDS	7	6	6	11	10
E 295 E3-01 DO YOU WORK WITH RELAYS ON YOUR PRESENT JOB	17	0	16	24	20
E 296 E3-02 DO YOU ADJUST RELAYS	5	0	7	4	0
E 297 E3-03 DO YOU CLEAN RELAYS	5	0	6	4	10
E 298 E3-04 DO YOU INSPECT RELAYS	8	0	7	14	10
E 299 E3-05 DO YOU REMOVE OR REPLACE COMPLETE RELAYS	10	0	8	17	10
E 300 E3-06 DO YOU REMOVE OR REPLACE PARTS OR RELAYS	1	0	2	0	0
E 301 E3-07 DO YOU TROUBLESHOOT RELAYS	10	0	7	18	10
E 302 E3-08 DO YOU STRAIGHTEN RELAY CONTACTS	5	0	6	4	0
E 303 E3-09 DO YOU PERFORM TASKS ON RELAY CONTACTS	5	0	5	6	0
E 304 E3-10 DO YOU PERFORM TASKS ON RELAY CORES	0	0	0	0	0
E 305 E3-11 DO YOU PERFORM TASKS ON RELAY COILS	0	0	0	0	0
E 306 E3-12 DO YOU PERFORM TASKS ON RELAY ARMATURES	0	0	0	0	0
E 307 E3-13 DO YOU PERFORM TASKS ON RELAY SPRINGS	2	0	3	3	0
E 308 E3-14 DO YOU USE OR REFER TO SINGLE POLE, SINGLE THROW (SPST) SCHEMATIC SYMBOLS FOR RELAYS	11	0	10	17	20
E 309 E3-15 DO YOU USE OR REFER TO SINGLE POLE, SINGLE THROW (SPST), NORMALLY CLOSED (NC) SCHEMATIC SYMBOLS FOR RELAYS	11	0	9	18	20
E 310 E3-16 DO YOU USE OR REFER TO SINGLE POLE, DOUBLE THROW (DPDT) SCHEMATIC SYMBOLS FOR RELAYS	10	0	8	15	20
E 311 E3-17 DO YOU USE OR REFER TO DOUBLE POLE, DOUBLE THROW (DPDT) SCHEMATIC SYMBOLS FOR RELAYS	10	0	9	15	20
E 312 E3-18 DO YOU USE OR REFER TO OTHER RELAY SYMBOLS SCHEMATIC SYMBOLS FOR RELAYS	9	0	7	15	10
E 313 E3-19 DO YOU CHECK ELECTRICAL CONTINUITY OF COILS BY MEASURING RESISTANCE	6	0	5	10	0
F 314 FI-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH MICROPHONES	2	0	2	1	10
F 315 FI-02 DO YOU INSPECT MICROPHONES	0	0	0	1	0
F 316 FI-03 DO YOU CLEAN MICROPHONES	0	0	1	0	0
F 317 FI-04 DO YOU OPERATE MICROPHONES	2	0	2	1	10
F 318 FI-05 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS BUT DO NOT TROUBLESHOOT DOWN TO COMPONENT	1	0	1	1	0
F 319 FI-06 DO YOU TROUBLESHOOT DOWN TO MICROPHONE PARTS	0	0	0	0	0
F 320 FI-07 DO YOU REMOVE OR REPLACE COMPLETE MICROPHONES	1	0	1	0	0
F 321 FI-08 DO YOU REMOVE OR REPLACE MICROPHONE PARTS	0	0	0	0	0
F 322 FI-09 DO YOU PERFORM TASKS ON CARBON MICROPHONES	1	0	1	1	10
F 323 FI-10 DO YOU PERFORM TASKS ON CAPACITOR MICROPHONES	0	0	1	0	0
F 324 FI-11 DO YOU PERFORM TASKS ON CRYSTAL MICROPHONES	1	0	1	1	0
F 325 FI-12 DO YOU PERFORM TASKS ON DYNAMIC MICROPHONES	1	0	1	0	0
F 326 FI-13 DO YOU PERFORM TASKS ON RIBBON MICROPHONES	0	0	1	0	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DR-TSK	SPL U01	SPL 002	SPL 003	SPL 004	SPL 005
F 327 F2-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH SPEAKERS	1	0	0	3	10
F 328 F2-02 DO YOU INSPECT SPEAKERS	1	0	0	1	10
F 329 F2-03 DO YOU CLEAN SPEAKERS	0	0	0	0	0
F 330 F2-04 DO YOU OPERATE SPEAKERS	1	0	0	1	10
F 331 F2-05 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS BUT DO NOT TROUBLESHOOT DOWN TO COMPONENT	0	0	0	0	0
F 332 F2-06 DO YOU TROUBLESHOOT DOWN TO SPEAKER PARTS	0	0	0	0	0
F 333 F2-07 DO YOU REMOVE OR REPLACE COMPLETE SPEAKERS	1	0	0	1	10
F 334 F2-08 DO YOU REMOVE OR REPLACE SPEAKER PARTS	0	0	0	0	0
F 335 F2-09 DO YOU PERFORM ANY TASKS ON SPEAKER CONES	0	0	0	0	0
F 336 F2-10 DO YOU PERFORM ANY TASKS ON SPEAKER SPIDERS	0	0	0	0	0
F 337 F2-11 DO YOU PERFORM ANY TASKS ON SPEAKER FIELD COILS	0	0	0	0	0
F 338 F2-12 DO YOU PERFORM ANY TASKS ON SPEAKER VOICE COILS	0	0	0	0	0
F 339 F2-13 DO YOU PERFORM ANY TASKS ON SPEAKER PERMANENT MAGNETS	0	0	0	0	0
F 340 F2-14 DO YOU PERFORM ANY TASKS ON SPEAKER ELECTROMAGNETS	0	0	0	0	0
F 341 F2-15 DO YOU PERFORM ANY TASKS ON SPEAKER SOFT IRON CONES	0	0	0	0	0
F 342 F3-01 DO YOU USE OSCILLOSCOPES IN YOUR PRESENT JOB	51	31	55	51	30
F 343 F3-02 DO YOU USE OSCILLOSCOPES TO PERFORM OPERATIONAL CHECKS	37	13	38	42	30
F 344 F3-03 DO YOU USE OSCILLOSCOPES TO PERFORM ALIGNMENTS OR ADJUSTMENTS	41	19	43	45	30
F 345 F3-04 DO YOU USE OSCILLOSCOPES TO TROUBLESHOOT ELECTRONIC CIRCUITS	33	6	35	35	30
F 346 F3-05 DO YOU USE OSCILLOSCOPES TO MEASURE FREQUENCY	42	25	45	41	30
F 347 F3-06 DO YOU USE OSCILLOSCOPES TO MEASURE TIME	41	31	41	48	20
F 348 F3-07 DO YOU USE OSCILLOSCOPES TO OBSERVE LISAJOUS PATTERNS	4	6	4	4	0
F 349 F3-08 DO YOU USE OSCILLOSCOPES TO OBSERVE SIGNALS WHILE UTILIZING ATTENUATOR PROBES	29	19	31	30	20
F 350 F3-09 DO YOU USE OSCILLOSCOPES TO MAKE FREQUENCY OR TIME MEASUREMENTS USING DELAY TIME MULTIPLIERS	20	19	20	21	20
F 351 F3-10 DO YOU USE OSCILLOSCOPES TO MEASURE AC VOLTAGE	40	25	44	38	20
F 352 F3-11 DO YOU USE OSCILLOSCOPES TO MEASURE OR OBSERVE SIGNALS AFTER FIRST ADJUSTING THE GAIN AND DC BAL CONTROLS	21	13	20	27	20
F 353 F3-12 DO YOU USE OSCILLOSCOPES TO MEASURE DC VOLTAGE	35	19	37	38	20
F 354 G1-01 DO YOU WORK WITH SEMICONDUCTOR DIODES IN YOUR PRESENT JOB	10	0	7	17	20
G 355 G1-02 DO YOU INSPECT DIODES	9	0	6	17	30
G 356 G1-03 DO YOU REMOVE OR REPLACE DIODES	6	0	4	11	30
G 357 G1-04 DO YOU CHECK DIODES USING AN INSTRUMENT	6	0	4	8	20
G 358 G1-05 DO YOU USE ENERGY LEVEL DIAGRAMS IN YOUR WORK WITH DIODES	0	0	0	0	0
G 359 G1-06 DO YOU USE PN JUNCTION DIODE CHARACTERISTIC CURVES, TOGETHER WITH VALUES OF FORWARD AND REVERSE BIAS VOLTAGE,	0	0	0	0	0
G 360 G1-07 DO YOU COMPUTE FORWARD OR REVERSE BIAS RESISTANCE FOR DIODES	0	0	1	0	0

OSCILLOSCOPES

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DRT-Task	SPL				
	001	002	003	004	005
G 361 GI-08 DO YOU USE OR REFER TO THE GENERAL RULE THAT TEMPERATURE CAN AFFECT THE OPERATION OF DIODES	3	0	1	7	20
G 362 GI-09 DO YOU IDENTIFY SEMICONDUCTOR DIODES AS OPPOSED TO OTHER ELECTRONIC COMPONENTS, SUCH AS RESISTORS, BASED ON	6	0	3	10	30
G 363 GI-10 DO YOU REFER TO, OR DO YOU DETERMINE THE GENERAL EFFECTS OF DOPING ON CURRENT FLOW	1	0	1	0	0
G 364 GI-11 DO YOU USE OR REFER TO MEASUREMENTS OF FORWARD BIAS RESISTANCE	3	0	2	3	20
G 365 GI-12 DO YOU USE OR REFER TO DIODE COLOR CODING	2	0	2	3	10
G 366 GI-13 DO YOU USE OR REFER TO CENTRIFUGAL FORCE OF AN ELECTRON IN ORBIT AROUND A NUCLEUS	0	0	0	0	0
G 367 GI-14 DO YOU USE OR REFER TO CENTRIPETAL FORCE OF AN ELECTRON IN ORBIT AROUND A NUCLEUS	0	0	0	0	0
G 368 GI-15 DO YOU USE OR REFER TO DIODE NUMBERING SYSTEM, SUCH AS IN 538	5	0	2	8	30
G 369 GI-16 DO YOU USE OR REFER TO KINETIC ENERGY OF AN ELECTRON MOVING IN ORBIT	0	0	0	0	0
G 370 GI-17 DO YOU USE OR REFER TO POTENTIAL ENERGY OF AN ELECTRON MOVING IN ORBIT	0	0	0	0	0
G 371 GI-18 DO YOU USE OR REFER TO MEASUREMENTS OF REVERSE BIAS RESISTANCE	3	0	2	3	20
G 372 GI-19 DO YOU USE OR REFER TO NUMBER OF ELECTRONS IN A PARTICULAR SHELL OR ORBIT	0	0	0	0	0
G 373 GI-20 DO YOU USE OR REFER TO PERMISSIBLE ENERGY LEVELS OF AN ORBITING ELECTRON	0	0	0	0	0
G 374 GI-21 DO YOU USE OR REFER TO FORBIDDEN ENERGY LEVELS OF AN ORBITING ELECTRON	0	0	0	0	0
G 375 GI-22 DO YOU USE OR REFER TO VALENCE ELECTRONS (THOSE IN THE OUTERMOST SHELL)	0	0	0	0	0
G 376 GI-23 DO YOU USE OR REFER TO ATOMIC NUMBER (TOTAL NUMBER OF ELECTRONS IN ATOM)	0	0	0	1	0
G 377 GI-24 DO YOU USE OR REFER TO SYMBOLS ON THE DIODE WHICH INDICATE THE CATHODE AND ANODE	8	0	4	14	30
G 378 GI-25 DO YOU NEED TO KNOW WHICH MATERIALS ARE USED IN THE CONSTRUCTION OF DIODES SUCH AS GERMANIUM OR SILICON	0	0	0	1	0
G 379 GI-26 DO YOU NEED TO KNOW THAT SEMICONDUCTORS HAVE NEGATIVE TEMPERATURE COEFFICIENTS OF RESISTANCE (AS TEMPERATURE	1	0	1	3	0
G 380 GI-27 DO YOU USE OR REFER TO PN JUNCTION DIODE CHARACTERISTIC CURVES, SUCH AS VOLTAGE - CURRENT	0	0	1	0	0
G 381 GI-28 DO YOU DETERMINE WHETHER PN JUNCTION DIODES ARE FORWARD BIASED OR REVERSE BIASED WHEN YOU READ OH METER	4	0	2	7	20
G 382 GI-29 DO YOU USE OR REFER TO VALINCE BAND IN SEMICONDUCTOR MATERIALS	0	0	0	1	0

TASK GROUP SUMMARY
PERCENT MEMBERS PRACTICING

DRAFTS	SPL				
	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005
G 383 GI-30 DO YOU USE OR REFER TO FORBIDDEN BAND IN SEMICONDUCTOR MATERIALS	0	0	0	0	0
G 384 GI-31 DO YOU USE OR REFER TO CONDUCTION BAND IN SEMICONDUCTOR MATERIALS	0	0	0	0	0
G 385 GI-32 DO YOU USE OR REFER TO COVALENT BONDING IN SEMICONDUCTOR MATERIALS	0	0	0	0	0
G 386 GI-33 DO YOU USE OR REFER TO ELECTRON-HOLE PAIR CREATED IN SEMICONDUCTORS	0	0	0	1	0
G 387 GI-34 DO YOU USE OR REFER TO ELECTRON FLOW OR HOLE FLOW IN SEMICONDUCTORS	1	0	0	3	10
G 388 GI-35 DO YOU USE OR PREFER TO DONOR IMPURITY IN SEMICONDUCTORS	0	0	0	0	0
G 389 GI-36 DO YOU USE OR REFER TO ACCEPTOR IMPURITY IN SEMICONDUCTORS	0	0	0	0	0
G 390 GI-37 DO YOU USE OR REFER TO P-TYPE SEMICONDUCTOR MATERIAL	0	0	0	0	10
G 391 GI-38 DO YOU USE OR REFER TO N-TYPE SEMICONDUCTOR MATERIAL	0	0	0	0	10
G 392 GI-39 DO YOU USE OR REFER TO MAJORITY CARRIERS IN SEMICONDUCTORS	0	0	0	0	0
G 393 GI-40 DO YOU USE OR REFER TO MINORITY CARRIERS IN SEMICONDUCTORS	0	0	0	0	0
G 394 GI-41 DO YOU USE OR REFER TO JUNCTION RECOMBINATION IN SEMICONDUCTORS	0	0	0	0	0
G 395 GI-42 DO YOU USE OR REFER TO DEPLETION REGION IN SEMICONDUCTORS	0	0	0	0	0
G 396 GI-43 DO YOU USE OR REFER TO RELATIONSHIP BETWEEN BARRIER WIDTH AND DIFFERENCE OF POTENTIAL	0	0	0	0	0
G 397 GI-44 DO YOU USE OR REFER TO THE I _{U/I} BACK TO FRONT RESISTANCE RATIO FOR DIODES	4	0	2	4	40
G 398 GI-45 DO YOU USE OR REFER TO BARRIER HEIGHT IN SEMICONDUCTORS	0	0	0	0	10
G 399 GI-46 DO YOU USE OR REFER TO DIODE SUBSTITUTION INFORMATION	1	0	1	3	10
G 400 GI-47 DO YOU USE OR REFER TO MAXIMUM AVERAGE FORWARD CURRENT DIODE RATINGS	1	0	1	0	10
G 401 GI-48 DO YOU USE OR REFER TO PEAK RECURRENT FORWARD CURRENT DIODE RATINGS	0	0	1	0	0
G 402 GI-49 DO YOU USE OR REFER TO MAXIMUM SURGE CURRENT DIODE RATINGS	1	0	1	0	10
G 403 GI-50 DO YOU USE OR REFER TO PEAK REVERSE (INVERSE) VOLTAGE DIODE RATINGS	1	0	1	0	10
G 404 GI-51 DO YOU WORK WITH TRANSISTORS IN YOUR PRESENT JOB.	1	0	10	29	20
G 405 GI-52 DO YOU INSPECT TRANSISTORS	10	0	7	18	20
G 406 GI-53 DO YOU REMOVE OR REPLACE TRANSISTORS	7	0	4	15	20
G 407 GI-54 DO YOU CHECK TRANSISTORS USING AN INSTRUMENT	6	0	3	10	10
G 408 GI-55 DO YOU USE OR REFER TO Emitter - Base (EB) FORWARD AND REVERSE RESISTANCE MEASUREMENTS	4	0	2	8	20
G 409 GI-56 DO YOU USE OR REFER TO COLLECTOR - BASE (CB) FORWARD AND REVERSE RESISTANCE MEASUREMENTS	4	0	2	7	20

POLYHARMONIC TASKS BY DAFSC GROUPS
TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

GPSUMI PAGE 18

AF HUMAN RESOURCES LABORATORY
AIR FORCE SYSTEMS COMMAND

ITEM	TASK	SPL			SPL			SPL		
		001	002	003	004	005	001	002	003	004
G 410 G2-07	DO YOU USE OR REFER TO Emitter - COLLECTOR (EC) RESISTANCE MEASUREMENTS	4	0	2	7	20				
G 411 G2-08	DO YOU USE OR REFER TO HIGH BIASING THAT AFFECTS THE PHYSICAL BARRIER WIDTH OF THE Emitter - BASE JUNCTION	1	0	1	0	10				
G 412 G2-09	DO YOU USE OR REFER TO HIGH BIASING THAT AFFECTS THE PHYSICAL BARRIER WIDTH OF THE COLLECTOR - BASE JUNCTION	1	0	1	0	10				
G 413 G2-10	DO YOU USE OR REFER TO THE PHYSICAL SIZE OF THE TRANSISTOR STRUCTURE (COLLECTOR, BASE AND Emitter)	2	0	1	4	10				
G 414 G2-11	DO YOU USE OR REFER TO LEAKAGE CURRENT (ICBO) IN A TRANSISTOR	0	0	0	0	10				
G 415 G2-12	DO YOU USE OR REFER TO TRANSISTOR SCHEMATIC SYMBOLS	11	0	7	23	30				
G 416 G2-13	DO YOU USE OR REFER TO TRANSISTOR NOTATION SUCH AS Q1, Q2, Q3, ETC	11	0	7	23	30				
G 417 G2-14	DO YOU USE OR REFER TO TRANSISTOR SUBSTITUTION INFORMATION	2	0	1	4	10				
G 418 G2-15	DO YOU USE OR REFER TO THE GENERAL RULE THAT THE TRANSISTOR BASE CURRENT IS NORMALLY SIGNIFICANTLY LARGER THAN THE Emitter CURRENT	1	0	1	1	10				
G 419 G2-16	DO YOU USE THE INFORMATION THAT THE EFFECT OF Emitter BASE VOLTAGE ON BASE CURRENT IS THE CONTROLLING FACTOR FOR G 420 G2-17 DO YOU USE THE GENERAL RULE THAT LEAKAGE CURRENT (ICBO) IN A TRANSISTOR INCREASES AS TEMPERATURE INCREASES	4	0	2	6	10				
G 421 G2-18	DO YOU USE OR REFER TO TRANSISTOR CHARACTERISTIC CURVES	0	0	1	0	0				
G 422 G2-19	DO YOU USE OR REFER TO BETA TRANSISTOR GAINS	0	0	0	0	0				
G 423 G2-20	DO YOU USE OR REFER TO ALPHA TRANSISTOR GAINS	0	0	0	0	0				
G 424 G2-21	DO YOU USE OR REFER TO GAMMA TRANSISTOR GAINS	0	0	0	0	0				
G 425 G2-22	DO YOU CALCULATE BETA TRANSISTOR GAINS	0	0	0	0	0				
G 426 G2-23	DO YOU CALCULATE ALPHA TRANSISTOR GAINS	0	0	0	0	0				
G 427 G2-24	DO YOU CALCULATE GAMMA TRANSISTOR GAINS	0	0	0	0	0				
G 428 G3-01	DO YOU WORK WITH TRANSISTOR AMPLIFIERS IN YOUR PRESENT JOB	4	0	2	8	20				
G 429 G3-02	DO YOU INSPECT TRANSISTOR AMPLIFIERS	3	0	1	7	10				
G 430 G3-03	DO YOU ALIGN OR ADJUST TRANSISTOR AMPLIFIERS	2	0	1	6	0				
G 431 G3-04	DO YOU TROUBLESHOOT TO THE AMPLIFIER CIRCUIT LEVEL	3	0	1	7	10				
G 432 G3-05	DO YOU TROUBLESHOOT TO AMPLIFIER COMPONENTS	2	0	1	4	10				
G 433 G3-06	DO YOU REMOVE OR REPLACE THE COMPLETE AMPLIFIER	3	0	2	7	10				
G 434 G3-07	DO YOU REMOVE OR REPLACE AMPLIFIER COMPONENTS	1	0	0	1	10				
G 435 G3-08	DO YOU USE OR REFER TO COMMON Emitter, THE CHANGE IN COLLECTOR CURRENT WHICH RESULTS FROM A CHANGE IN BASE	0	0	0	0	0				
G 436 G3-09	DO YOU USE OR REFER TO COMMON Emitter, THE CALCULATIONS NECESSARY TO MEASURE THE SPECIFIC CHANGE IN	0	0	0	0	0				

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

ITEMS	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005
G 437 G3-10 DO YOU USE OR REFER TO (COMMON Emitter) THE CHANGE IN COLLECTOR VOLTAGE WHICH RESULTS FROM A CHANGE IN BASE	1	0	0	3	10
G 438 G3-11 DO YOU USE OR REFER TO (COMMON Emitter) THE CALCULATIONS NECESSARY TO MEASURE THE SPECIFIC CHANGE IN	0	0	0	0	10
G 439 G3-12 DO YOU USE OR REFER TO (COMMON Emitter) THE CHANGE IN BASE CURRENT WHICH RESULTS FROM AN INPUT SIGNAL	1	0	0	0	20
G 440 G3-13 DO YOU USE OR REFER TO (COMMON Emitter) THE CALCULATIONS NECESSARY TO MEASURE THE SPECIFIC CHANGE IN	0	0	0	0	10
G 441 G3-14 DO YOU USE THE LOAD-LINE METHOD OF ANALYSIS IN YOUR CIRCUIT ANALYSIS THIS METHOD REQUIRES YOU TO PLOT A	0	0	0	0	0
G 442 G3-15 DO YOU USE OR REFER TO THE OPERATING POINT Q (QUIESCENT POINT) FOR A TRANSISTOR	1	0	0	1	10
G 443 G3-16 DO YOU CALCULATE THE SPECIFIC QUIESCENT POINT FOR A PARTICULAR TRANSISTOR	0	0	0	0	10
G 444 G3-17 DO YOU MEASURE VOLTAGE GAIN USED IN THE COMMON Emitter CONFIGURATION	1	0	0	4	10
G 445 G3-18 DO YOU MEASURE CURRENT GAIN USED IN THE COMMON Emitter CONFIGURATION	1	0	0	4	10
G 446 G3-19 DO YOU MEASURE POWER GAIN USED IN THE COMMON Emitter CONFIGURATION	1	0	0	4	10
G 447 G3-20 DO YOU CALCULATE THE VOLTAGE GAIN FOR SPECIFIC TRANSISTORS USING A FORMULA THAT IS, DO YOU DIVIDE THE CHANGE	0	0	0	0	0
G 448 G3-21 DO YOU CALCULATE THE CURRENT GAIN FOR SPECIFIC TRANSISTORS USING A FORMULA THAT IS, DO YOU DIVIDE THE	0	0	0	0	0
G 449 G3-22 DO YOU CALCULATE THE POWER GAIN FOR A SPECIFIC TRANSISTOR USING A FORMULA THAT IS, DO YOU MULTIPLY THE	0	0	0	0	0
G 450 G3-23 DO YOU NEED TO KNOW THAT MORE COLLECTOR CURRENT IS GENERATED WITH LESS COLLECTOR VOLTAGE AS TEMPERATURE	0	0	0	1	0
G 451 G3-24 DO YOU COMPUTE THE STATIC OPERATING POINT (Q) OF A TRANSISTOR AT DIFFERENT TEMPERATURES	0	0	0	0	0
G 452 G3-25 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH	0	0	0	0	0
G 453 G3-26 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH SELF-	0	0	1	0	0

DFT-TSK	SPL			SPL			SPL		
	001	002	003	004	005	006	007	008	009
G 454 G3-27 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITY THE COMPONENTS ASSOCIATED WITH	0	0	0	0	0	0	0	0	0
G 455 G3-28 DO YOU IDENTIFY IN SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITY THE COMPONENTS ASSOCIATED WITH	0	0	1	0	0	0	0	0	0
G 456 G3-29 DO YOU IDENTIFY IN SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITY THE COMPONENTS ASSOCIATED WITH	0	0	1	0	0	0	0	0	0
G 457 G3-30 DO YOU IDENTIFY IN SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITY THE COMPONENTS ASSOCIATED WITH	0	0	1	0	0	0	0	0	0
G 458 G3-31 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM Emitter SWAMPING, RESISTOR STABILIZATION	0	0	0	0	0	0	0	0	0
G 459 G3-32 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM SELF-BIAS STABILIZATION	1	0	1	0	10	0	0	0	0
G 460 G3-33 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM THRESHOLD OR STABILIZATION	1	0	0	1	10	0	0	0	0
G 461 G3-34 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM FORWARD BIAS DIODE STABILIZATION	1	0	1	1	10	0	0	0	0
G 462 G3-35 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM REVERSE BIAS DIODE STABILIZATION	1	0	1	1	10	0	0	0	0
G 463 G3-36 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM DOUBLE DIODE STABILIZATION	0	0	1	0	0	0	0	0	0
G 464 G3-37 DO YOU IDENTIFY AMPLITUDE DISTORTION FOR TRANSISTOR CIRCUITS	1	0	1	1	10	0	0	0	0
G 465 G3-38 DO YOU TROUBLESHOOT TRANSISTOR CIRCUITS TO FIND THE CAUSES OF AMPLITUDE DISTORTION	1	0	0	1	10	0	0	0	0
G 466 G3-39 DO YOU IDENTIFY FREQUENCY DISTORTION FOR TRANSISTOR CIRCUITS	1	0	0	1	10	0	0	0	0
G 467 G3-40 DO YOU IDENTIFY PHASE DISTORTION FOR TRANSISTOR CIRCUITS	0	0	0	0	0	0	0	0	0
G 468 G3-41 DO YOU TROUBLESHOOT TRANSISTOR CIRCUITS TO FIND THE CAUSES OF PHASE DISTORTION	0	0	0	0	0	0	0	0	0
G 469 G3-42 DO YOU TROUBLESHOOT TRANSISTOR CIRCUITS TO FIND THE CAUSES OF FREQUENCY DISTORTION	1	0	0	1	10	0	0	0	0
G 470 G3-43 DO YOU NEED TO KNOW THE DEGENERATIVE EFFECTS ON THE CIRCUIT CAUSED BY CHANGING Emitter RESISTANCE FOR	0	0	0	0	0	0	0	0	0
G 471 G3-44 DO YOU DETERMINE THE CLASS OF OPERATION FOR AMPLIFIERS IN ORDER TO TROUBLESHOOT AMPLIFIER CIRCUITS	1	0	1	1	10	0	0	0	0
G 472 G3-45 DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS	1	0	1	1	0	0	0	0	0
G 473 G3-46 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL AMPLIFIERS	3	0	2	6	10	0	0	0	0
G 474 G3-47 DO YOU TROUBLESHOOT OR REPAIR COMPLEMENTARY SYMMETRY CIRCUITS	0	0	1	0	0	0	0	0	0
G 475 G3-48 DO YOU TROUBLESHOOT OR REPAIR COMPOUND-CONNECTED AMPLIFIERS	1	0	1	1	0	0	0	0	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DUTY-TASK

		SPL 001	SPL 002	SPL 003	SPL 004	SPL 005
6. 470 J-49 DO YOU TROUBLESHOOT OR REPAIR CASCADE-CONNECTED AMPLIFIERS	1	0	1	3	0	
H 477 H-491 DO YOU USE OR REFER TO VARACTORS	2	0	1	1	10	
H 478 H-492 DO YOU USE OR REFER TO TUNNEL DIODES	4	0	2	7	10	
H 479 H-493 DO YOU USE OR REFER TO FIELD-EFFECT TRANSISTORS (FET)	9	0	7	18	0	SOLID STATE SPECIAL PURPOSE DEVICES
H 480 H-494 DO YOU USE OR REFER TO UNJUNCTION TRANSISTORS	7	0	7	13	0	
H 481 H-495 DO YOU USE OR REFER TO ZINER DIODES	19	0	17	25	40	
H 482 H-496 DO YOU USE OR REFER TO INTEGRATED CIRCUITS	26	0	26	30	50	
H 483 H-497 IN YOUR PRESENT JOB, DO YOU WORK WITH POWER SUPPLIES	41	38	40	44	30	
H 484 H-498 DO YOU INSPECT POWER SUPPLIES	30	38	26	35	30	
H 485 H-499 DO YOU CLEAN POWER SUPPLIES	19	13	18	21	10	
H 486 H-500 DO YOU ALIGN OR ADJUST POWER SUPPLIES	24	13	20	37	30	
H 487 H-501 DO YOU TROUBLESHOOT TO POWER SUPPLY CIRCUIT LEVEL	17	0	13	30	30	
H 488 H-502 DO YOU TROUBLESHOOT TO POWER SUPPLY COMPONENTS	11	0	8	18	30	
H 489 H-503 DO YOU REMOVE OR REPLACE COMPLETE POWER SUPPLIES	20	0	18	31	20	
H 490 H-504 DO YOU REMOVE OR REPLACE POWER SUPPLY COMPONENTS	10	0	7	20	20	
H 491 H-505 DO YOU WORK WITH HALF-WAVE RECTIFIERS	9	0	7	15	20	
H 492 H-506 DO YOU WORK WITH FULL-WAVE RECTIFIERS OTHER THAN BRIDGE RECTIFIERS	7	0	5	15	10	
H 493 H-507 DO YOU WORK WITH BRIDGE RECTIFIERS	9	0	6	17	20	
H 494 H-508 DO YOU WORK WITH THREE-PHASE RECTIFIERS	3	0	2	7	0	
H 495 H-509 DO YOU USE OR REFER TO INPUT VOLTAGE	18	13	16	24	20	
H 496 H-510 DO YOU USE OR REFER TO INPUT FREQUENCY	13	13	12	14	10	
H 497 H-511 DO YOU USE OR REFER TO PEAK OUTPUT VOLTAGE	14	13	12	21	10	
H 498 H-512 DO YOU USE OR REFER TO AVERAGE OUTPUT VOLTAGE	12	13	9	17	20	
H 499 H-513 DO YOU USE OR REFER TO RIPPLE AMPLITUDE	4	0	3	6	20	
H 500 H-514 DO YOU USE OR REFER TO RIPPLE FREQUENCY	3	0	2	4	10	
H 501 H-515 DO YOU USE OR REFER TO PEAK REVERSE (INVERSE) VOLTAGE	3	0	2	6	10	
H 502 H-516 DO YOU USE OR REFER TO SHAPE OF OUTPUT WAVEFORMS	11	6	8	17	20	
H 503 H-517 DO YOU USE OR REFER TO EFFECTIVE OUTPUT VOLTAGE	12	13	10	15	30	
H 504 H-518 DO YOU WORK WITH CIRCUITS WHICH EMPLOY CAPACITIVE FILTERS	7	0	3	17	20	
H 505 H-519 DO YOU WORK WITH CIRCUITS WHICH EMPLOY INDUCTIVE FILTERS	6	0	3	13	10	
H 516 H-520 DO YOU WORK WITH CIRCUITS WHICH EMPLOY CAPACITIVE INPUT L-TYPE FILTERS	4	0	2	7	10	
H 507 H-521 DO YOU WORK WITH CIRCUITS WHICH EMPLOY INDUCTIVE INPUT L-TYPE FILTERS	2	0	2	4	10	
H 508 H-522 DO YOU WORK WITH CIRCUITS WHICH EMPLOY LC PI-TYPE FILTERS	2	0	2	4	0	
H 509 H-523 DO YOU WORK WITH CIRCUITS WHICH EMPLOY RC PI-TYPE FILTERS	2	0	2	4	10	
H 511 H-524 DO YOU WORK WITH CIRCUITS WHICH EMPLOY DON'T REMEMBER WHICH TYPE OF FILTER	12	0	11	20	0	
H 511 H-525 DO YOU HAVE THE OPTION OF REPLACING ONE TYPE OF FILTER WITH A DIFFERENT TYPE FILTER	0	0	0	1	0	
H 512 H-526 DO YOU WORK WITH OSCILLATORS IN YOUR PRESENT JOB	4	0	3	6	0	

TASK GROUP SUMMARY
PRACTICE MEMBERS PERFORMING

		SYSTEM		SPL 001		SPL 002		SPL 003		SPL 004		SPL 005	
H 513	H3-02	DO YOU INSPECT OSCILLATORS		3	0	2	7	0					
H 514	H3-03	DO YOU ALIGN OR ADJUST OSCILLATORS		4	0	3	7	0					
H 515	H3-04	DO YOU REMOVE OR REPLACE COMPLETE OSCILLATORS		3	0	2	6	0					
H 516	H3-05	DO YOU REMOVE OR REPLACE OSCILLATOR COMPONENTS		1	0	1	1	0					
H 517	H3-06	DO YOU TROUBLESHOOT TO OSCILLATOR CIRCUIT LEVEL		3	0	2	6	0					
H 518	H3-07	DO YOU TROUBLESHOOT TO OSCILLATOR COMPONENTS		1	0	1	3	0					
H 519	H3-08	DO YOU USE OR REFER TO FEEDBACK		3	0	1	8	0					
H 520	H3-09	DO YOU USE OR REFER TO FREQUENCY DETERMINING DEVICES		2	0	1	4	0					
(FDD)													
H 521	H3-10	DO YOU USE OR REFER TO AMPLITUDE STABILITY		1	0	1	3	0					
H 522	H3-11	DO YOU USE OR REFER TO FREQUENCY STABILITY		1	0	1	3	0					
H 523	H3-12	DO YOU USE OR REFER TO DAMPING		2	0	2	4	0					
H 524	H3-13	DO YOU USE OR REFER TO REGENERATIVE FEEDBACK		2	0	2	1	0					
H 525	H3-14	DO YOU USE OR REFER TO PIEZOELECTRIC EFFECT		2	0	2	4	0					
H 526	H3-15	DO YOU USE OR REFER TO CRITICAL DAMPING		1	0	1	1	0					
H 527	H3-16	DO YOU USE OR REFER TO OVER DAMPING		1	0	1	1	0					
H 528	H3-17	DO YOU USE OR REFER TO UNDER DAMPING		1	0	1	1	0					
H 529	H3-18	DO YOU WORK WITH OSCILLATORS WHICH USE LC TANK		1	0	1	4	0					
CIRCUITS AS FDD													
H 530	H3-19	DO YOU WORK WITH OSCILLATORS WHICH USE RC NETWORKS AS FDD		1	0	1	4	0					
H 531	H3-20	DO YOU WORK WITH OSCILLATORS WHICH USE CRYSTALS AS FDD		2	0	1	4	0					
H 532	H3-21	DO YOU WORK WITH OSCILLATORS WHICH USE DON'T REMEMBER WHICH TYPE OF FDD		2	0	3	3	0					
H 533	H3-22	DO YOU WORK WITH SERIES HARTLEY SINUSOIDAL OSCILLATORS		1	0	1	1	0					
H 534	H3-23	DO YOU WORK WITH SHUNT HARTLEY SINUSOIDAL OSCILLATORS		1	0	1	1	0					
H 535	H3-24	DO YOU WORK WITH COLPITTS SINUSOIDAL OSCILLATORS		1	0	1	1	0					
H 536	H3-25	DO YOU WORK WITH CLAPP SINUSOIDAL OSCILLATORS		0	0	0	0	0					
H 537	H3-26	DO YOU WORK WITH BUTLER SINUSOIDAL OSCILLATORS		0	0	0	0	0					
H 538	H3-27	DO YOU WORK WITH DON'T REMEMBER WHICH TYPE OF OSCILLATORS		3	0	3	4	0					
OSCILLATORS													
I 549	11-01	DO YOU WORK WITH MULTIVIBRATORS IN YOUR PRESENT JOB		3	0	2	7	0					
I 549	11-02	DO YOU INSPECT WAVE GENERATING OR SHAPING CIRCUITS		2	0	2	4	0					
I 541	11-03	DO YOU ALIGN OR ADJUST WAVE GENERATING OR SHAPING CIRCUITS		3	0	2	7	0					
I 542	11-04	DO YOU CALIBRATE WAVE GENERATING OR SHAPING CIRCUITS		2	0	2	6	0					
I 543	11-05	DO YOU TROUBLESHOOT TO WAVE GENERATING OR SHAPING CIRCUITS		3	0	2	7	0					
I 544	11-06	DO YOU TROUBLESHOOT TO WAVE GENERATING OR SHAPING CIRCUIT COMPONENTS		2	0	1	6	0					
I 545	11-07	DO YOU REMOVE OR REPLACE COMPLETE WAVE GENERATING OR SHAPING CIRCUITS		3	0	2	7	0					
I 546	11-08	DO YOU REMOVE OR REPLACE WAVE GENERATING OR SHAPING CIRCUIT COMPONENTS		1	0	0	3	0					
I 547	11-09	DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN LC TANK CIRCUITS		2	0	1	6	0					

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DRAFTS

		SPL 001	SPL 002	SPL 003	SPL 004	SPL 005
1-348	11-10 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN HC	2	0	1	7	0
1-547	11-11 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN CRYSTALS	2	0	1	4	0
1-549	11-12 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN DON'T MEMBER WHICH TYPE OF FOO	2	0	1	4	0
1-561	11-13 DO YOU WORK WITH ASTABLE MULTIVIBRATORS	1	0	0	3	0
1-562	11-14 DO YOU WORK WITH MONOSTABLE MULTIVIBRATORS	1	0	0	4	0
1-563	11-15 DO YOU WORK WITH BISTABLE MULTIVIBRATORS	1	0	0	4	0
1-564	11-16 DO YOU WORK WITH DON'T MEMBER WHICH TYPE OF MULTIVIBRATORS	3	0	2	7	0
1-555	12-01 DO YOU WORK WITH LIMITERS OR CLAMPERS IN YOUR PRESENT JOB	2	0	1	7	0
1-564	12-02 DO YOU WORK WITH SERIES DIODE LIMITERS	1	0	1	3	0
1-557	12-03 DO YOU WORK WITH SHUNT DIODE LIMITERS	2	0	1	6	0
1-558	12-04 DO YOU WORK WITH LIMITERS WITH BIAS	1	0	0	4	0
1-559	12-05 DO YOU WORK WITH ZENER DIODE LIMITERS	2	0	1	6	0
1-560	12-06 DO YOU WORK WITH TRANSISTOR LIMITERS	1	0	1	3	0
1-561	12-07 DO YOU WORK WITH DON'T KNOW WHICH TYPE OF LIMITERS	1	0	0	3	0
1-562	12-08 DO YOU WORK WITH BASIC DIODE CLAMPING CIRCUITS	1	0	0	3	0
1-563	12-09 DO YOU WORK WITH DIODE CLAMPING CIRCUITS WITH BIAS	1	0	0	3	0
1-564	12-10 DO YOU WORK WITH DON'T KNOW WHICH TYPE OF CLAMPING CIRCUITS	1	0	1	1	0
1-565	13-01 IN YOUR PRESENT JOB, DO YOU WORK ON EQUIPMENT WHICH CONTAINS ELECTRON TUBES	4	0	3	6	10
1-566	13-02 DO YOU CHECK ELECTRON TUBES TO SEE IF THEY ARE GOOD	2	0	2	3	0
1-567	13-03 DO YOU USE TUBE TESTERS TO CHECK ELECTRON TUBES	1	0	1	3	0
1-568	13-04 DO YOU USE MULTIMETERS TO CHECK ELECTRON TUBES	2	0	2	3	0
1-569	13-05 DO YOU USE SCOPES TO CHECK ELECTRON TUBES	2	0	2	3	0
1-570	13-06 DO YOU USE SUBSTITUTION TO CHECK ELECTRON TUBES	2	0	2	3	10
1-571	13-07 DO YOU USE OR REFER TO CUTOFF	1	0	1	1	0
1-572	13-08 DO YOU USE OR REFER TO PEAK INVERSE VOLTAGE RATING	0	0	1	0	0
1-573	13-09 DO YOU USE OR REFER TO PEAK CURRENT RATING	1	0	1	1	0
1-574	13-10 DO YOU USE OR REFER TO TRANSIT TIME	0	0	0	0	0
1-575	13-11 DO YOU USE OR REFER TO PLATE DISSIPATION RATINGS	0	0	0	1	0
1-576	13-12 DO YOU USE OR REFER TO SATURATION	1	0	1	1	0
1-577	13-13 DO YOU USE OR REFER TO DC PLATE RESISTANCE	0	0	0	1	0
1-578	13-14 DO YOU COMPUTE ACTUAL VALUES OF THE DC PLATE RESISTANCE FOR ELECTRON TUBES	0	0	0	0	0
1-579	13-15 DO YOU USE OR REFER TO PLATE VOLTAGE	1	0	2	1	0
1-580	13-16 DO YOU USE OR REFER TO PLATE CURRENT	1	0	2	1	0
1-581	13-17 DO YOU USE OR REFER TO GRID VOLTAGE	1	0	2	1	0
1-582	13-18 DO YOU USE OR REFER TO GRID CURRENT	1	0	2	1	0
1-583	13-19 DO YOU USE OR REFER TO CATHODE VOLTAGE	1	0	2	1	0
1-584	13-20 DO YOU USE OR REFER TO CATHODE CURRENT	1	0	2	1	0
1-585	13-21 DO YOU USE OR REFER TO THE TRIODE AMPLIFICATION FACTOR (THE AMPLIFICATION FACTOR FOR TRIODES IS DEFINED AS	0	0	1	0	0

PERFORMANCE TASKS BY DATA GROUPS
TASK GROUP SUMMARY
PLACEMENT MEMBERS PERFORMING

SPRUMI PAGE 24

AF HUMAN RESOURCES LABORATORY
AIR FORCE SYSTEMS COMMAND

	OBJECTIVES	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005
1 586	13-22 DO YOU CALCULATE ACTUAL VALUES OF TRIODE AMPLIFICATION FACTORS	0	0	0	0	0
1 587	13-23 DO YOU USE OR REFER TO MULTIGRID (TETRODE, PENTODE, ETC) AMPLIFICATION FACTORS	0	0	0	1	0
1 588	13-24 DO YOU USE OR REFER TO ELECTRON TUBE TRANSCONDUCTANCE (G, WHICH IS MEASURED IN MHOS)	0	0	0	0	0
1 589	13-25 DO YOU CALCULATE ACTUAL VALUES OF ELECTRON TUBE TRANSCONDUCTANCES	0	0	0	0	0
1 590	13-26 DO YOU USE OR REFER TO THE ELECTRON TUBE PARAMETER CALLED AC PLATE RESISTANCE	0	0	0	1	0
1 591	13-27 DO YOU CALCULATE ACTUAL VALUES OF AC PLATE RESISTANCE	0	0	0	0	0
1 592	13-28 DO YOU USE OR REFER TO ELECTRON TUBE INTERELECTRODE CAPACITANCE	0	0	0	1	0
1 593	13-29 DO YOU USE OR REFER TO CHARACTERISTIC CURVES IN YOUR WORK WITH ELECTRON TUBES	0	0	0	1	0
1 594	13-30 DO YOU USE CHARACTERISTIC CURVES TO SELECT PLATE VOLTAGE FOR A SPECIFIED BIAS	0	0	0	1	0
1 595	13-31 DO YOU USE CHARACTERISTIC CURVES TO SELECT PLATE CURRENT FOR A SPECIFIED BIAS	0	0	0	0	0
1 596	13-32 DO YOU USE CHARACTERISTIC CURVES TO SELECT BIAS REQUIRED FOR CUTOFF	0	0	0	1	0
1 597	13-33 DO YOU USE CHARACTERISTIC CURVES TO SELECT BIAS REQUIRED FOR SATURATION	0	0	0	1	0
1 598	13-34 DO YOU USE OR REFER TO ELECTRON TUBE AMPLIFIER GAIN	1	0	1	1	0
1 599	13-35 DO YOU USE OR REFER TO ELECTRON TUBE AMPLIFIER EFFICIENCY	1	0	1	1	0
1 600	13-36 DO YOU USE TEST TUBE CHECKERS TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN	1	0	1	1	0
1 601	13-37 DO YOU USE MULTIMETERS TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN	1	0	1	0	0
1 602	13-38 DO YOU USE OSCILLOSCOPES TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN	1	0	1	0	0
1 603	13-39 DO YOU USE CHARACTERISTIC CURVES TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN	0	0	0	1	0
1 604	13-40 DO YOU CALCULATE ANY ELECTRON TUBE CAPACITANCES SUCH AS INPUT CAPACITANCE	0	0	0	0	0
1 605	13-41 DO YOU USE OR REFER TO TUBE SOCKET NOTATION	2	0	1	4	0
1 606	13-42 DO YOU USE OR REFER TO PIN NUMBERING SYSTEMS	2	0	1	4	0
1 607	13-43 DO YOU USE OR REFER TO THE TYPE OF MATERIAL OR THE OPERATING TEMPERATURE OF THE LIMITING SURFACE IN THE	0	0	0	0	0
1 608	13-44 DO YOU USE OR REFER TO TUBE SUBSTITUTION MATERIAL SUCH AS MANUALS OR CHARTS	2	0	1	4	0
1 609	13-45 DO YOU WORK WITH ELECTRON TUBE AMPLIFIERS OR CIRCUITS IN YOUR PRESENT JOB	1	0	1	3	0
1 610	13-46 DO YOU DETERMINE THE CLASS OF OPERATION FOR ELECTRON TUBE AMPLIFIERS IN ORDER TO TROUBLESHOOT AMPLIFIER	1	0	1	1	0
						ELECTRON TUBE AMPLIFIERS AND CIRCUITS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

PERCENT	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005
J 511 J1-3 DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS	1	0	1	1	0
J 512 J1-4 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL AMPLIFIERS	1	0	1	1	0
J 513 J1-5 DO YOU TROUBLESHOOT OR REPAIR COMPOUND-CONNECTED	0	0	1	0	0
J 514 J1-6 DO YOU TROUBLESHOOT OR REPAIR CASCADE-CONNECTED	1	0	1	1	0
J 515 J1-7 DO YOU TROUBLESHOOT OR REPAIR AMPLIFIERS	1	0	1	0	0
J 516 J2-01 DO YOU WORK WITH GAS TUBES (HOT CATHODE OR COLD CATHODE)	1	0	1	3	0
J 517 J2-02 DO YOU WORK WITH CATHODE-RAY TUBES	6	6	5	8	0
J 518 J2-03 DO YOU USE OR REFER TO THE CHARACTERISTICS OF BEAM POWER TUBES	0	0	0	0	0
J 519 J2-04 DO YOU TROUBLESHOOT OR REPAIR CIRCUITS IN WHICH BEAM POWER TUBES ARE USED	0	0	0	0	0
J 520 J2-05 DO YOU USE OR REFER TO THE CHARACTERISTICS OF THERATRONS	1	0	1	1	0
J 521 J2-06 DO YOU TROUBLESHOOT OR REPAIR CIRCUITS IN WHICH THERATRONS ARE USED	1	0	1	1	0
J 522 J2-07 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTRON GUNS OF CATHODE-RAY TUBES (CRTS)	3	6	2	6	0
J 523 J2-08 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTROMAGNETIC DEFLECTION SYSTEMS OF CATHODE-RAY TUBES	2	6	1	4	0
J 524 J2-09 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTROSTATIC DEFLECTION SYSTEMS OF CATHODE-RAY TUBES	2	6	1	3	0
J 525 J2-10 DO YOU USE OR REFER TO PHOSPHOR SCREENS	2	6	0	6	0
J 526 J2-11 DO YOU USE OR REFER TO AGUADAG COUNTINGS	1	0	1	1	0
J 527 J2-12 DO YOU USE OR REFER TO ELECTRON OPTICS	1	0	0	4	0
J 528 J2-13 DO YOU USE OR REFER TO PERSISTENCE	1	0	0	3	0
J 529 J2-14 DO YOU USE OR REFER TO DECAY TIMES	0	0	0	1	0
J 530 J2-15 DO YOU USE OR REFER TO FLUORESCENCE	1	0	1	3	0
J 531 J2-16 DO YOU USE OR REFER TO PHOSPHORESCENCE	1	6	0	4	0
J 532 J3-11 DO YOU WORK ON TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB	4	0	3	7	0
J 533 J3-02 DO YOU PERFORM TASKS ON FREQUENCY CONVERTERS	1	6	1	1	0
J 534 J3-03 DO YOU PERFORM TASKS ON FREQUENCY MIXERS	1	6	0	1	0
J 535 J3-04 DO YOU USE OR REFER TO THE HETERODYNING OF SIGNALS IN YOUR WORK WITH TRANSMIT OR RECEIVE SYSTEMS	1	6	0	3	0
J 536 J3-05 DO YOU PERFORM TASKS ON FREQUENCY MODULATORS	0	0	0	0	0
J 537 J3-06 DO YOU PERFORM TASKS ON MODULATED OSCILLATORS	0	0	0	0	0
K 503 K1-1 DO YOU WORK ON AM TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB	1	0	1	0	0
K 504 K1-2 DO YOU INSPECT AM TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0
K 505 K1-3 DO YOU CLEAN AM TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0
K 506 K1-4 DO YOU ALIGN OR ADJUST AM TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0
AM SYSTEMS					

Task Group Summary

		SPL 001	SPL 002	SPL 003	SPL 004	SPL 005
K 642 K1-05 DO YOU TROUBLESHOOT TO AM TRANSMIT OR RECEIVE SYSTEMS		0	0	0	0	0
K 643 K1-06 DO YOU TROUBLESHOOT TO AM TRANSMIT OR RECEIVE SYSTEMS		0	0	0	0	0
K 644 K1-07 DO YOU REMOVE OR REPLACE AM TRANSMIT OR RECEIVE SYSTEMS		0	0	0	0	0
K 645 K1-08 DO YOU REMOVE OR REPLACE AM TRANSMIT OR RECEIVE SYSTEMS		0	0	0	0	0
K 646 K1-09 DO YOU REMOVE OR REPLACE SYSTEMS		0	0	0	0	0
K 647 K1-10 DO YOU REMOVE OR REPLACE SYSTEMS		1	0	1	0	0
K 648 K1-11 DO YOU REMOVE OR REPLACE SYSTEMS		0	0	0	0	0
K 649 K1-12 DO YOU REMOVE OR REPLACE SYSTEMS		0	0	0	0	0
K 650 K1-13 DO YOU REMOVE OR REPLACE SYSTEMS		0	0	0	0	0
K 651 K1-14 DO YOU REMOVE OR REPLACE SYSTEMS		0	0	0	0	0
K 652 K1-15 DO YOU REMOVE OR REPLACE SYSTEMS		0	0	0	0	0
K 653 K1-16 DO YOU REMOVE OR REPLACE SYSTEMS		0	0	0	0	0
K 654 K1-17 DO YOU REMOVE OR REPLACE SYSTEMS		0	0	0	0	0
K 655 K1-18 DO YOU USE OR REFER TO FREQUENCY STABILIZATION IN TRANSMITTERS		0	0	0	0	0
K 656 K1-19 DO YOU USE OR REFER TO SENSITIVITY OF RECEIVERS		0	0	0	0	0
K 657 K1-20 DO YOU USE OR REFER TO SELECTIVITY OF RECEIVERS		0	0	0	0	0
K 658 K1-21 DO YOU USE OR REFER TO 2ND HARMONIC DISTORTION		0	0	0	0	0
K 659 K1-22 DO YOU USE OR REFER TO BANDPASS DISTORTION		0	0	0	0	0
K 660 K1-23 DO YOU USE OR REFER TO SQUARE LAW DISTORTION		0	0	0	0	0
K 661 K1-24 DO YOU USE OR REFER TO CD-CHANNEL INTERFERENCE		0	0	0	0	0
K 662 K1-25 DO YOU USE OR REFER TO IMAGE FREQUENCIES IN RECEIVERS		0	0	0	0	0
K 663 K1-26 DO YOU USE OR REFER TO SIGNAL TO IMAGE RATIOS OR IMAGE REJECTION RATIOS		0	0	0	0	0
K 664 K1-27 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH AM TRANSMITTER SCHEMATIC DIAGRAMS		0	0	0	0	0
K 665 K1-28 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH AM RECEIVER SCHEMATIC DIAGRAMS		0	0	0	0	0
K 666 K2-01 DO YOU WORK WITH FM TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB		2	0	1	4	0
K 667 K2-02 DO YOU INSPECT FM TRANSMIT OR RECEIVE SYSTEMS		1	0	1	3	0
K 668 K2-03 DO YOU CLEAN FM TRANSMIT OR RECEIVE SYSTEMS		1	0	1	0	0
K 669 K2-04 DO YOU ALIGN FM TRANSMIT OR RECEIVE SYSTEMS		1	0	1	0	0
K 670 K2-05 DO YOU TROUBLESHOOT TO FM TRANSMIT OR RECEIVE SYSTEMS		1	0	0	3	0
K 671 K2-06 DO YOU TROUBLESHOOT TO FM TRANSMIT OR RECEIVE SYSTEMS		0	0	0	1	0
K 672 K2-07 DO YOU REMOVE OR REPLACE FM TRANSMIT OR RECEIVE SYSTEMS		0	0	0	0	0
K 673 K2-08 DO YOU REMOVE OR REPLACE FM TRANSMIT OR RECEIVE SYSTEMS		0	0	0	0	0
K 674 K2-09 DO YOU PERFORM TASKS ON AUDIO AMPLIFIERS		0	0	0	1	0
K 675 K2-10 DO YOU PERFORM TASKS ON FREQUENCY MULTIPLIERS		0	0	0	1	0

TASK GROUP SUMMARY
PERCENT MILESTONES PREDICTING

DRY-TEST

	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005
K 676 K 2-11 DO YOU PERFORM TASKS ON DRIVERS (INTERMEDIATE AMPLIFIERS)	0	0	0	1	0
K 677 K 2-12 DO YOU PERFORM TASKS ON POWER AMPLIFIERS	0	0	0	1	0
K 678 K 2-13 DO YOU PERFORM TASKS ON HF AMPLIFIERS	0	0	0	1	0
K 679 K 2-14 DO YOU PERFORM TASKS ON FREQUENCY CONVERTERS	0	0	0	1	0
K 680 K 2-15 DO YOU PERFORM TASKS ON HF AMPLIFIERS	0	0	0	1	0
K 681 K 2-16 DO YOU PERFORM TASKS ON LIMITERS	0	0	0	1	0
K 682 K 2-17 DO YOU PERFORM TASKS ON FREQUENCY DISCRIMINATORS	0	0	0	1	0
K 683 K 2-18 DO YOU TRACE SIGNALS ON CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM TRANSMITTERS	1	0	0	3	0
K 684 K 2-19 DO YOU TRACE SIGNALS ON CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM RECEIVERS	1	0	0	3	0
K 685 K 3-01 DO YOU CONVERT DECIMAL BASE 10 NUMBERS TO OCTAL BASE 8 NUMBERS	1	0	1	0	10
K 686 K 3-02 DO YOU CONVERT DECIMAL NUMBERS TO BINARY (BASE 2)	2	0	2	3	10
K 687 K 3-03 DO YOU CONVERT OCTAL NUMBERS TO DECIMAL NUMBERS	0	0	1	0	0
K 688 K 3-04 DO YOU CONVERT OCTAL NUMBERS TO BINARY NUMBERS	0	0	0	0	0
K 689 K 3-05 DO YOU CONVERT BINARY NUMBERS TO DECIMAL NUMBERS	2	0	1	3	0
K 690 K 3-06 DO YOU CONVERT BINARY NUMBERS TO OCTAL NUMBERS	0	0	0	0	0
K 691 K 3-07 DO YOU ADD BINARY NUMBERS TO GET A SUM	3	0	2	4	10
K 692 K 3-08 DO YOU SUBTRACT BINARY NUMBERS USING THE END-AROUND CARRY METHOD	1	0	1	0	0
K 693 K 3-09 DO YOU SUBTRACT BINARY NUMBERS USING THE DIRECT SUBTRACTION METHOD	1	0	1	0	0
K 694 K 3-10 DO YOU ADD OCTAL NUMBERS TO GET A SUM	0	0	0	0	0
L 695 LIST OUT IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS RELATING TO LOGIC FUNCTIONS	9	0	7	18	0
L 696 L 1-02 DO YOU CONSTRUCT TRUTH TABLES FOR AND LOGIC SYMBOLS OR GATES	4	0	3	6	0
L 697 L 1-03 DO YOU CONSTRUCT TRUTH TABLES FOR OR LOGIC SYMBOLS OR GATES	3	0	3	4	0
L 698 L 1-04 DO YOU CONSTRUCT TRUTH TABLES FOR AND OR LOGIC SYMBOLS WITH STATE INDICATORS	3	0	3	4	0
L 699 L 1-05 DO YOU CONSTRUCT TRUTH TABLES FOR EXCLUSIVE OR LOGIC SYMBOLS OR GATES	3	0	3	3	0
L 700 L 1-06 DO YOU USE OR REFER TO TRUTH TABLES FOR AND LOGIC SYMBOLS OR GATES	7	0	6	11	0
L 703 L 1-07 DO YOU USE OR REFER TO TRUTH TABLES FOR EXCLUSIVE OR LOGIC SYMBOLS	5	0	5	8	0
L 704 L 1-08 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR AND GATES	7	0	7	13	0
L 705 L 1-09 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR OR GATES	7	0	7	11	0
L 706 L 1-12 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR NAND OR NOR GATES	9	0	7	15	0

NUMBERING SYSTEMS

LOGIC FUNCTIONS

PERCENT HUMAN TASKS BY DUTY CLASS

TASK GROUP SUMMARY
PERCENT HUMANS PERFORMING

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AF HUMAN RESOURCES LABORATORY
AIR FORCE SYSTEMS COMMAND

BY-TSK

SPL SPL SPL SPL SPL SPL
001 002 003 004 005

L 707 L-13 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR EXCLUSIVE OR GATES

L 708 L-2-01 IN YOUR PRESENT JOB DO YOU PERFORM ANY TASKS

L 709 L-2-02 DO YOU RELATING TO BOOLEAN EQUATIONS, LOGIC DIAGRAMS, OR LOGIC

L 710 L-2-03 DO YOU DRAW LOGIC SYMBOLS FOR DIRECT COUPLED

L 711 L-2-04 DO YOU TRANSISTOR LOGIC (DTL) CIRCUITS

L 712 L-2-05 DO YOU CONSTRUCT TRUTH TABLES FOR CURRENT MODE LOGIC

L 713 L-2-06 DO YOU (CHL) CIRCUITS

L 714 L-2-07 DO YOU BOOLEAN EQUATIONS

L 715 L-2-08 DO YOU MEASURE INPUTS OR OUTPUTS OF LOGIC GATES

L 716 L-2-09 DO YOU DEVELOP OR ANALYZE BOOLEAN EQUATIONS IN THE

L 717 L-2-10 DO YOU PROCESS OF TROUBLESHOOTING DIGITAL CIRCUITS

L 718 L-2-11 DO YOU USE OR REFER TO TRUTH TABLES FOR CURRENT MODE

L 719 L-2-12 DO YOU LOGIC (ICL) CIRCUITS

L 720 L-2-13 DO YOU USE OR REFER TO LOGIC DIAGRAMS CONSISTING OF

L 721 L-2-14 DO YOU MORE THAN ONE GATE

L 722 L-2-15 DO YOU COMPUTE SUM AND CARRY EXPRESSIONS FOR SERIAL

L 723 L-2-16 DO YOU HALF OR FULL ADDER LOGIC DIAGRAMS

L 724 L-2-17 DO YOU WORK WITH ASTABLE (FREE RUNNING)

L 725 L-2-18 DO YOU WORK WITH HISTARLF (FLIP-FLOP) MULTIVIBRATORS

L 726 L-2-19 DO YOU WORK WITH MONOSTABLE (ONE-SHOT)

L 727 L-2-20 DO YOU WORK WITH MULTIVIBRATOR

L 728 L-2-21 DO YOU USE OR REFER TO SINGLE-SHOT MULTIVIBRATOR

L 729 L-2-22 DO YOU USE OR REFER TO FLIP-FLOP MULTIVIBRATOR

L 730 L-2-23 DO YOU USE OR REFER TO FLIP-FLOP CIRCUIT DIAGRAMS

L 731 L-2-24 DO YOU USE OR REFER TO FLIP-FLOP TRUTH TABLES

L 732 L-2-25 DO YOU USE OR REFER TO COMPLEMENTED FLIP-FLOP

L 733 L-2-26 DO YOU USE OR REFER TO FLIP-FLOP SYMBOLS

L 734 L-2-27 DO YOU MEASURE OUTPUT WAVE SHAPES OF LOGIC CIRCUITS

L 735 L-2-28 DO YOU DRAW DATA FLOW THROUGH COMPLEMENTED FLIP-FLOP

L 736 L-2-29 DO YOU DRAW SCHEMATIC DIAGRAMS

L 737 L-2-30 DO YOU DRAW DATA FLOW THROUGH COMPLEMENTING FLIP-

L 738 L-2-31 DO YOU CONSTRUCT TRUTH TABLES FOR JK FLIP-FLOP LOGIC SYMBOLS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

U-TASK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005
L 733 L3-01 DO YOU WORK WITH DIGITAL COUNTERS IN YOUR PRESENT JOB	18	13	21	15	0
L 734 L3-02 DO YOU USE OR REFER TO UP-COUNTERS	4	0	4	7	0
L 735 L3-03 DO YOU USE OR REFER TO DOWN-COUNTERS	5	0	4	7	0
L 736 L3-04 DO YOU USE OR REFER TO SERIAL COUNTERS	2	6	2	1	0
L 737 L3-05 DO YOU USE OR REFER TO PARALLEL COUNTERS	1	0	1	0	0
L 738 L3-06 DO YOU USE OR REFER TO RING COUNTERS	0	0	1	0	0
L 739 L3-07 DO YOU USE OR REFER TO DECADE COUNTERS	5	0	6	4	0
L 740 L3-08 DO YOU USE OR REFER TO COUNT DETECT CIRCUITS	1	0	1	0	0
L 741 L3-09 DO YOU USE OR REFER TO DOWN CLOCKS	4	0	4	6	0
L 742 L3-10 DO YOU USE OR REFER TO UP CLOCKS	4	0	5	4	0
L 743 L3-11 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF UP-COUNTERS HAVING COMPLEMENTED FLIP-FLOPS	3	0	3	4	0
L 744 L3-12 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF SERIAL UP-OR DOWN-COUNTERS HAVING COMPLEMENTING FLIP-FLOPS	2	0	3	3	0
L 745 L3-13 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF DECADE COUNTERS	2	0	2	4	0
L 746 L3-14 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF RING COUNTERS	0	0	0	0	0
L 747 L3-15 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF SERIAL UP-COUNTERS FEEDING A PARALLEL STORAGE REGISTER	0	0	0	0	0
L 748 L3-16 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF SHIFT REGISTERS	0	0	0	1	0
L 749 L3-17 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF OTHER TYPE OF COUNTERS	1	0	0	4	0
L 750 L3-18 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR UP-COUNTERS HAVING COMPLEMENTED FLIP-FLOPS	1	0	1	1	0
L 751 L3-19 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR SERIAL UP-OR DOWN-COUNTERS HAVING COMPLEMENTED FLIP-FLOPS	0	0	1	0	0
L 752 L3-20 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR SERIAL UP-COUNTERS FEEDING A PARALLEL STORAGE REGISTER	0	0	0	0	0
L 753 L3-21 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR OTHER TYPES OF COUNTERS	1	0	1	4	0
L 754 L3-22 DO YOU CONSTRUCT TRUTH TABLES FROM LOGIC DIAGRAMS OF DECADE COUNTERS	0	0	0	0	0
L 755 L3-23 DO YOU DETERMINE THE STATE OF EACH FLIP-FLOP IN RING COUNTERS FOR SPECIFIC INPUT PULSES	1	0	1	0	0
L 756 L3-24 DO YOU DETERMINE THE APPROPRIATE AND GATE NECESSARY IN COUNT DETECT CIRCUITS TO INDICATE A REQUIRED COUNT	1	0	2	0	0
M 757 M1-01 DO YOU WORK WITH SAWTOOTH WAVE GENERATORS	7	0	7	10	0
M 758 M1-02 DO YOU WORK WITH TRAPEZOIDAL WAVE GENERATORS	0	0	0	0	0
M 759 M1-03 DO YOU WORK WITH PULSED OSCILLATORS WITH REGENERATIVE FEEDBACK	2	0	1	6	0
M 760 M1-04 DO YOU WORK WITH PULSED OSCILLATORS WITHOUT REGENERATIVE FEEDBACK	2	0	2	3	0
TIMING CIRCUITS					

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DRT-TSK	SPL				
	001	002	003	004	005
M 761 M1-05 DO YOU WORK WITH BLOCKING OSCILLATORS	2	0	1	4	0
M 762 M1-06 DO YOU USE OR REFER TO RISE TIME	7	6	6	10	10
M 763 M1-07 DO YOU USE OR REFER TO FALL OR FLYBACK TIME	4	6	2	8	10
M 764 M1-08 DO YOU USE OR REFER TO SLEEF TIME	17	13	17	18	20
M 765 M1-09 DO YOU USE OR REFER TO ELECTRICAL LENGTH OF SAWTOOTH	6	0	5	6	30
WAVEFORMS					
M 766 M1-10 DO YOU USE OR REFER TO PHYSICAL LENGTH OF SAWTOOTH	5	0	4	6	10
M 767 M1-11 DO YOU USE OR REFER TO LINEAR SLOPE OF SAWTOOTH	4	0	3	7	0
M 768 M1-12 DO YOU USE OR REFER TO GATE LENGTH OF SAWTOOTH	3	0	2	6	0
WAVEFORMS					
M 769 M2-01 DO YOU USE SIGNAL GENERATORS IN YOUR PRESENT JOB	42	25	45	44	20
M 770 M2-02 DO YOU PERFORM OPERATIONAL CHECKS WHILE USING SIGNAL GENERATORS	29	0	30	38	10
M 771 M2-03 DO YOU PERFORM PERIODIC MAINTENANCE SUCH AS ADJUSTING, ALIGNING, OR CALIBRATING WHILE USING SIGNAL	29	13	31	34	10
M 772 M2-04 DO YOU TROUBLESHOOT TO AN ASSEMBLY OR SUBASSEMBLY WHILE USING SIGNAL GENERATORS	18	0	20	20	10
M 773 M2-05 DO YOU TROUBLESHOOT TO THE SMALLEST REPLACEABLE COMPONENT WHILE USING SIGNAL GENERATORS	5	0	7	3	0
M 774 M2-06 DO YOU USE AUDIO SINE-WAVE GENERATORS	30	25	29	35	20
M 775 M2-07 DO YOU USE AUDIO NON-SINE-WAVE GENERATORS SUCH AS SQUARE WAVE, TRIANGLE PULSE, OR SPIKE	5	0	6	3	0
M 776 M2-08 DO YOU USE RF GENERATORS LESS THAN 1,000 MHZ	11	0	12	14	0
M 777 M2-09 DO YOU USE RF GENERATORS GREATER THAN 1,000 MHZ	6	6	7	6	0
M 778 M2-10 DO YOU USE OTHER SPECIAL PURPOSE OR MULTI-FUNCTION GENERATORS	6	0	8	6	0
M 779 M3-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH ALTERNATING CURRENT OR DIRECT CURRENT MOTORS OR	23	19	26	20	10
M 780 M3-02 DO YOU INSPECT MOTORS	11	6	12	11	10
M 781 M3-03 DO YOU CLEAN OR LUBRICATE MOTORS	5	0	6	4	0
M 782 M3-04 DO YOU OPERATE MOTORS	14	19	17	8	10
M 783 M3-05 DO YOU REMOVE OR REPLACE COMPLETE MOTORS	2	0	1	6	0
M 784 M3-06 DO YOU REMOVE OR REPLACE MOTOR PARTS	0	0	0	0	0
M 785 M3-07 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS OF MOTORS	7	13	8	6	10
M 786 M3-08 DO YOU TROUBLESHOOT DOWN TO COMPONENT PARTS OF MOTORS	0	0	0	0	10
M 787 M3-09 DO YOU PERFORM ANY TASKS ON FIELD COILS	0	0	0	0	0
M 788 M3-10 DO YOU PERFORM ANY TASKS ON ARMATURES	0	0	1	0	0
M 789 M3-11 DO YOU PERFORM ANY TASKS ON ROTORS	0	0	1	0	0
M 790 M3-12 DO YOU PERFORM ANY TASKS ON BRUSHES	1	0	1	0	0
M 791 M3-13 DO YOU PERFORM ANY TASKS ON SLIP RINGS	0	0	0	0	0
M 792 M3-14 DO YOU PERFORM ANY TASKS ON COMMUTATORS	0	0	1	0	0
M 793 M3-15 DO YOU PERFORM ANY TASKS ON POLE PIECES	0	0	0	0	0

TASK GROUP SUMMARY
PERCENT MEMBERS FENSHIRING

TYPE	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005
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N 194 M-16 DO YOU DETERMINE OR MEASURE THE MAGNITUDE OF THE FORCE OR TORQUE CREATED BY A MOTOR	0	0	0	0	0
N 195 M-17 DO YOU DETERMINE OR MEASURE THE DIRECTION OF THE MECHANICAL FORCE OR TORQUE CREATED BY A MOTOR	0	0	0	0	0
N 196 M-18 DO YOU DETERMINE OR MEASURE THE MAGNITUDE OR DIRECTION OF THE INDUCED VOLTAGE IN MOTORS	0	0	1	0	0
N 197 M-19 DO YOU WORK WITH SYNCHRONOUS MOTORS	2	0	1	6	0
N 198 M-20 DO YOU WORK WITH INDUCTION MOTORS	4	13	3	4	0
N 199 M-21 DO YOU WORK WITH SPLIT-PHASE MOTORS	5	6	4	0	0
N 200 M-22 DO YOU WORK WITH SOME COMBINATION OF THE ABOVE MOTORS	4	6	4	3	0
N 201 M-23 DO YOU INSPECT GENERATORS	17	13	20	13	10
N 202 M-24 DO YOU CLEAN OR LUBRICATE GENERATORS	2	0	3	1	0
N 203 M-25 DO YOU OPERATE GENERATORS	19	13	23	13	10
N 204 M-26 DO YOU REMOVE OR REPLACE COMPLETE GENERATORS	2	2	1	0	0
N 205 M-27 DO YOU REMOVE OR REPLACE GENERATOR PARTS	0	0	0	0	0
N 206 M-28 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS OF GENERATORS	9	6	9	8	10
N 207 M-29 DO YOU TROUBLESHOOT DOWN TO COMPONENT PARTS OF GENERATORS	0	0	0	0	0
N 208 M-31 DO YOU WORK WITH METERS IN YOUR PRESENT JOB	56	56	60	51	40
N 209 M-32 DO YOU CONCEPTUALIZE OR CONSIDER THE FUNCTIONS OF PERMANENT MAGNETS	6	0	6	8	0
N 210 M-33 DO YOU CONCEPTUALIZE OR CONSIDER THE FUNCTIONS OF MOVING COILS	7	0	8	8	0
N 211 M-34 DO YOU CONCEPTUALIZE OR CONSIDER THE FUNCTIONS OF SPIRAL SPRINGS	5	0	5	7	0
N 212 M-35 DO YOU READ METER SCALES	5	56	60	51	40
N 213 M-36 DO YOU EXTEND THE RANGE OF AMMETERS	11	0	12	13	0
N 214 M-37 DO YOU ZERO OHMMETERS	56	50	60	52	40
N 215 M-38 DO YOU ZERO AMMETERS	25	13	28	23	30
N 216 M-39 DO YOU EXTEND THE RANGE OF VOLTMETERS	20	13	25	15	0
N 217 M-40 DO YOU USE OR REFER TO VOLTMETER SENSITIVITY EXPRESSED IN UNITS OF OHMS PER VOLTL	20	6	17	28	20
N 218 M-41 DO YOU WORK WITH SATURABLE REACTORS OR MAGNETIC AMPLIFIERS IN YOUR PRESENT JOB	1	0	0	4	0
N 219 M-42 DO YOU INSPECT MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	0	0	0	1	0
N 220 M-43 DO YOU CLEAN MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	0	0	0	0	0
N 221 M-44 DO YOU ADJUST MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	0	0	0	0	0
N 222 M-45 DO YOU TROUBLESHOOT MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	0	0	0	0	0
N 223 M-46 DO YOU REMOVE OR REPLACE MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	0	0	0	0	0
N 224 M-47 DO YOU REMOVE OR REPLACE MAGNETIC AMPLIFIER OR SATURABLE REACTOR COMPONENTS	0	0	0	0	0

UFT-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005
N 825 N2-08 DO YOU USE OR REFER TO HYSTERESIS CURVES OR LOOPS	0	0	0	1	0
N 826 N2-09 DO YOU INTERPRET SCHEMATIC DRAWINGS TO DEVELOP OUTPUT	0	0	0	1	0
WAVEFORMS ACROSS REACTOR WINDINGS OR LOAD RESISTORS OF					
N 827 N2-10 DO YOU MEASURE OUTPUT WAVEFORMS ACROSS REACTOR	0	0	0	0	0
WINDINGS OR LOAD RESISTORS OF SINGLE WINDING SATURABLE					
N 828 N2-11 DO YOU INTERPRET SCHEMATIC DRAWINGS TO DEVELOP OUTPUT	0	0	1	0	
WAVEFORMS FOR MAGNETIC AMPLIFIERS					
N 829 N2-12 DO YOU USE OR REFER TO COERCIVE FORCE IN SATURABLE	0	0	0	0	
REACTORS					
N 830 N2-13 DO YOU USE OR REFER TO RESIDUAL MAGNETISM IN	0	0	0	0	
SATURABLE REACTORS					
N 831 N2-14 DO YOU USE OR REFER TO FLUX DENSITY IN SATURABLE	0	0	0	0	
REACTORS					
N 832 N2-15 DO YOU USE OR REFER TO POINT OF SATURATION IN	0	0	0	0	
SATURABLE REACTORS					
N 833 H2-16 DO YOU USE OR REFER TO SATURABLE REACTOR SCHEMATIC	1	0	0	3	0
SYMBOLS					
N 834 N3-01 DO YOU WORK WITH WAVESHAPING CIRCUITS IN YOUR PRESENT	4	0	4	4	0
JOB					
N 835 N3-02 DO YOU USE OR REFER TO TRANSIENT INTERVALS	1	0	1	3	0
N 836 N3-03 DO YOU USE OR REFER TO PULSE WIDTH (PW)	3	0	3	3	0
N 837 N3-04 DO YOU USE OR REFER TO PULSE RECURRENCE TIME (PRT)	3	0	3	3	0
N 838 N3-05 DO YOU USE OR REFER TO PULSE RECURRENCE FREQUENCY	3	0	3	3	0
(PRF)					
N 839 N3-06 DO YOU USE OR REFER TO DIFFERENTIATING CIRCUITS	0	0	0	1	0
N 840 N3-07 DO YOU USE OR REFER TO INTEGRATING CIRCUITS	1	0	1	3	0
N 841 N3-08 DO YOU USE OR REFER TO THE CLASSIFICATION OF TIME	1	0	0	3	0
CONSTANTS (TC) AS LONG, MEDIUM, OR SHORT					
N 842 N3-09 DO YOU DETERMINE WHETHER AN LR OR RC CIRCUIT IS	0	0	0	1	0
DIFFERENTIATING OR INTEGRATING BASED ON THE TIME CONSTANT					
N 843 N3-10 DO YOU WORK WITH SQUARE WAVE GENERATORS	1	0	2	0	0
N 844 N3-11 DO YOU WORK WITH RECTANGULAR WAVE GENERATORS	1	0	1	0	0
O 845 O1-01 DO YOU WORK ON SINGLE SIDEBAND SYSTEMS IN YOUR	0	0	0	0	0
PRESNT JOB					
O 846 O1-02 DO YOU INSPECT SSB TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	
O 847 O1-03 DO YOU CLEAN SSB TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	
O 848 O1-04 DO YOU ALIGN SSB TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	
O 849 O1-05 DO YOU TROUBLESHOOT TO SSB TRANSMIT OR RECEIVE	0	0	0	0	
SYSTEMS					
O 850 O1-06 DO YOU TROUBLESHOOT TO SSB TRANSMIT OR RECEIVE	0	0	0	0	
COMPONENTS					
O 851 O1-07 DO YOU REMOVE OR REPLACE SSB TRANSMIT OR RECEIVE	0	0	0	0	
SYSTEMS					
O 852 O1-08 DO YOU REMOVE OR REPLACE SSB TRANSMIT OR RECEIVE	0	0	0	0	
COMPONENTS					
SINGLE SIDEBAND SYSTEMS					

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

NY-TASK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005
0 853 01-09 DO YOU PERFORM TASKS ON SSB AUDIO AMPLIFIERS	0	0	0	0	0
0 854 01-10 DO YOU PERFORM TASKS ON SSB BALANCED MODULATORS	0	0	0	0	0
0 855 01-11 DO YOU PERFORM TASKS ON SSB CARRIER OSCILLATORS	0	0	0	0	0
0 856 01-12 DO YOU PERFORM TASKS ON SSB 'LC FILTERS	0	0	0	0	0
0 857 01-13 DO YOU PERFORM TASKS ON SSB CRYSTAL FILTERS	0	0	0	0	0
0 858 01-14 DO YOU PERFORM TASKS ON SSB MECHANICAL FILTERS	0	0	0	0	0
0 859 01-15 DO YOU PERFORM TASKS ON SSB OSCILLATORS	0	0	0	0	0
0 860 01-16 DO YOU PERFORM TASKS ON SSB MIXERS	0	0	0	0	0
0 861 01-17 DO YOU PERFORM TASKS ON SSB DRIVERS	0	0	0	0	0
0 862 01-18 DO YOU PERFORM TASKS ON SSB POWER AMPLIFIERS	0	0	0	0	0
0 863 01-19 DO YOU PERFORM TASKS ON SSB RF AMPLIFIERS	0	0	0	0	0
0 864 01-20 DO YOU PERFORM TASKS ON SSB FREQUENCY CONVERTERS	0	0	0	0	0
0 865 01-21 DO YOU PERFORM TASKS ON SSB IF AMPLIFIERS	0	0	0	0	0
0 866 01-22 DO YOU PERFORM TASKS ON SSB DEMODULATORS	0	0	0	0	0
0 867 01-23 DO YOU PERFORM TASKS ON SSB DON'T REMEMBER WHICH SSB SYSTEM STAGES	0	0	0	0	0
0 868 01-24 DO YOU USE OR REFER TO SELECTIVE FADING	0	0	0	0	0
0 869 01-25 DO YOU USE OR REFER TO PEAK POWER	0	0	0	0	0
0 870 01-26 DO YOU USE OR REFER TO FREQUENCY STABILITY	0	0	0	0	0
0 871 01-27 DO YOU USE OR REFER TO RESPONSE CURVES FOR BANDWIDTH FILTERS	0	0	0	0	0
0 872 01-28 DO YOU CALCULATE PEAK POWER OR EFFECTIVE POWER OF SSB TRANSMITTERS	0	0	0	0	0
0 873 01-29 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SSB TRANSMITTER SCHEMATIC DIAGRAMS	0	0	0	0	0
0 874 01-30 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SSB RECEIVER SCHEMATIC DIAGRAMS	0	0	0	0	0
0 875 02-01 DO YOU WORK ON PULSE MODULATION SYSTEMS IN YOUR PRESENT JOB	0	0	0	1	0
0 876 02-02 DO YOU INSPECT PULSE MODULATION SYSTEMS	0	0	0	1	0
0 877 02-03 DO YOU CLEAN PULSE MODULATION SYSTEMS	0	0	0	0	0
0 878 02-04 DO YOU ALIGN PULSE MODULATION SYSTEMS	0	0	0	0	0
0 879 02-05 DO YOU TROUBLESHOOT TO PULSE MODULATION SYSTEMS	0	0	0	1	0
0 880 02-06 DO YOU TROUBLESHOOT TO PULSE MODULATION SYSTEMS COMPONENTS	0	0	0	0	0
0 881 02-07 DO YOU REMOVE OR REPLACE PULSE MODULATION SYSTEMS	0	0	0	0	0
0 882 02-08 DO YOU REMOVE OR REPLACE PULSE MODULATION SYSTEMS COMPONENTS	0	0	0	0	0
0 883 02-09 DO YOU WORK ON PULSE-AMPLITUDE MODULATION (PAM) SYSTEMS	0	0	0	1	0
0 884 02-10 DO YOU WORK ON PULSE-DURATION MODULATION (PDM) SYSTEMS	0	0	0	1	0
0 885 02-11 DO YOU WORK ON PULSE-POSITION MODULATION (PPM) SYSTEMS	0	0	0	0	0
0 886 02-12 DO YOU WORK ON PULSE-CODE MODULATION (PCM) SYSTEMS	0	0	0	1	0
0 887 02-13 DO YOU WORK ON LINE-PULSING MODULATION SYSTEMS	0	0	0	0	0
0 888 02-14 DO YOU WORK ON DON'T REMEMBER WHICH TYPE OF MODULATION SYSTEM	0	0	0	0	0

PERCENT MEMBERS PERFORMING TASKS BY TASK GROUPS

PERCENT MEMBERS PERFORMING

TASK GROUP SUMMARY

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AF HUMAN RESOURCES LABORATORY
AIR FORCE SYSTEMS COMMAND

DUTY TASK	SPL			
	001	002	003	004
0 489 02-15 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM POWER SUPPLIES	0	0	0	0
0 590 02-16 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM CHANGING CHOKES AND CHARGING DIODES	0	0	0	0
0 691 02-17 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM PULSE FORMING NETWORKS	0	0	1	0
0 692 02-18 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM TIMERS	0	0	0	0
0 693 02-19 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM SWITCHES SUCH AS GAS THYRATRONS	0	0	0	0
0 694 02-20 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM PULSE TRANSFORMERS	0	0	0	0
0 695 02-21 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM TRANSMITTER TUBES	0	0	0	0
0 696 02-22 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM RF AMPLIFIERS	0	0	1	0
0 697 02-23 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM FREQUENCY CONVERTERS	0	0	0	0
0 698 02-24 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM IF AMPLIFIERS	0	0	1	0
0 699 02-25 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM DETECTORS	0	0	0	0
0 700 02-26 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM VIDEO AMPLIFIERS	0	0	0	0
0 901 02-27 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM POWER VIDEO AMPLIFIERS	0	0	0	0
0 902 02-28 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM DON'T REMEMBER WHICH PULSE MODULATION SYSTEM STAGES	0	0	0	0
0 903 02-29 DO YOU USE OR REFER TO PULSE RECURRENT FREQUENCY (PHRF)	0	0	1	0
0 904 02-30 DO YOU USE OR REFER TO PULSE RECURRENT TIME (PRT) 0 905 02-31 DO YOU USE OR REFER TO PULSE WIDTH (PW)	0	0	1	0
0 906 02-32 DO YOU USE OR REFER TO PULSE SHAPE	0	0	1	0
0 907 02-33 DO YOU USE OR REFER TO PEAK POWER	0	0	1	0
0 908 02-34 DO YOU USE OR REFER TO AVERAGE POWER	0	0	1	0
0 909 02-35 DO YOU CALCULATE PULSE RECURRENT TIME (PRT) OR PULSE RECURRENT FREQUENCY (PRF)	0	0	0	0
0 910 02-36 DO YOU MEASURE PULSE RECURRENT TIME (PRT) OR PULSE RECURRENT FREQUENCY (PRF)	0	0	1	0
0 911 02-37 DO YOU USE FORMULAS TO CALCULATE AVERAGE POWER OR PEAK POWER OF PULSE MODULATION TRANSMIT SYSTEMS	0	0	1	0
0 912 02-38 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH PULSE MODULATION TRANSMITTER SCHEMATIC DIAGRAMS	0	0	1	0
0 913 02-39 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH PULSE MODULATION RECEIVER SCHEMATIC DIAGRAMS	0	0	1	0
0 914 03-01 DO YOU WORK WITH ANTENNAS IN YOUR PRESENT JOB	30	38	37	30
0 915 03-02 DO YOU INSPECT ANTENNAS	31	44	38	30

ANTENNAS

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

Cr-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005
0 916 03-03 DO YOU CLEAN ANTENNAS	24	38	36	8	30
0 917 03-04 DO YOU PHYSICALLY ALIGN ANTENNAS	16	25	21	4	10
0 918 03-05 DO YOU ELECTRICALLY ALIGN ANTENNAS	5	3	6	4	10
0 919 03-06 DO YOU TROUBLESHOOT TWO ANTENNAS	0	0	10	7	20
0 920 03-07 DO YOU TROUBLESHOOT TWO ANTENNA COMPONENTS	3	0	4	1	0
0 921 03-08 DO YOU REMOVE OR INSTALL ANTENNAS	27	38	35	7	30
0 922 03-09 DO YOU REMOVE OR REPLACE COMPONENTS OF ANTENNAS	10	0	14	3	20
0 923 03-10 DO YOU USE OR REFER TO TECHNICAL DATA CONTAINING REPRESENTATIONS OF ELECTRIC FIELD LINES	1	0	1	0	0
0 924 03-11 DO YOU USE OR REFER TO TECHNICAL DATA CONTAINING REPRESENTATIONS OF MAGNETIC FIELD LINES	0	0	1	0	0
0 925 03-12 DO YOU DETERMINE THE DIRECTION OF THE MAGNETIC LINES IN RELATION TO THE ELECTRIC LINES OF FORCE FOR ANTENNAS	0	0	0	0	0
0 926 03-13 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE OF CORRECT LENGTH (HALF-WAVE) ACT AS INDUCTIVE LOADS	0	0	0	0	0
0 927 03-14 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE LONGER THAN A HALF-WAVE ACT AS CAPACITIVE LOADS	0	0	0	0	0
0 928 03-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE SHORTER THAN A HALF-WAVE ACT AS CAPACITIVE LOADS	0	0	0	0	0
0 929 03-16 DO YOU WORK WITH HERTZ ANTENNAS	1	0	2	1	0
0 930 03-17 DO YOU WORK WITH MARCONI ANTENNAS	0	0	0	0	0
0 931 03-18 DO YOU WORK WITH BROADSIDE ARRAYS	0	0	0	0	0
0 932 03-19 DO YOU WORK WITH END-FIRE ARRAYS	1	0	2	0	0
0 933 03-20 DO YOU WORK WITH CARDIOTIC ARRAYS	0	0	0	0	0
0 934 03-21 DO YOU WORK WITH COLLINEAR ARRAYS	1	0	2	0	0
0 935 03-22 DO YOU USE OR REFER TO THE TERM ELECTROMAGNETIC INDUCTION FIELDS WHEN WORKING WITH ANTENNAS	0	0	0	1	0
0 936 03-23 DO YOU MEASURE ELECTROMAGNETIC INDUCTION FIELDS OF ANTENNAS	0	0	0	1	0
0 937 03-24 DO YOU USE OR REFER TO THE TERM ELECTROMAGNETIC RADIATION FIELDS WHEN WORKING WITH ANTENNAS	1	0	1	3	0
0 938 03-25 DO YOU MEASURE ELECTROMAGNETIC RADIATION FIELDS OF ANTENNAS	0	0	0	1	0
0 939 03-26 DO YOU USE OR REFER TO THE TIME PHASE OF ELECTRIC (E) AND MAGNETIC (H) COMPONENTS IN ANTENNA RADIATION	0	0	0	0	0
0 940 03-27 DO YOU USE OR REFER TO THE TIME PHASE OF ELECTRIC (E) AND MAGNETIC (H) COMPONENTS IN ANTENNA INDUCTION FIELD	0	0	0	0	0
0 941 03-28 ARE ANY OF THE ANTENNAS YOU WORK ON LINEARLY POLARIZED	5	6	6	3	0
0 942 03-29 ARE ANY OF THE ANTENNAS YOU WORK ON CIRCULARLY POLARIZED	4	0	6	3	0
0 943 03-30 DO YOU MEASURE OR DETERMINE THE POLARITY OF ANTENNAS	1	0	1	0	0
0 944 03-31 DO YOU CONSTRUCT, OR MAKE THE CALCULATIONS NECESSARY TO CONSTRUCT, ANTENNAS OF CORRECT LENGTH FOR	0	0	1	0	0

DRY-TEST	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005
P 945 03-32 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS	0	6	0	0	0
P 946 03-33 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS SERVING AS DIRECTORS	0	6	0	0	0
P 947 03-34 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS SERVING AS REFLECTORS	0	6	0	0	0
P 948 03-35 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN DON'T REMEMBER WHAT KIND OF ELEMENTS	8	13	10	4	0
P 949 03-36 DO YOU WORK ON UNIDIRECTIONAL ANTENNAS	5	0	7	3	10
P 950 03-37 DO YOU WORK ON BI DIRECTIONAL ANTENNAS	2	0	3	0	10
P 951 03-38 DO YOU WORK ON DON'T REMEMBER THE DIRECTIONALITY	11	19	14	4	0
P 952 03-39 DO YOU WORK WITH ROTARY ANTENNA ARRAYS	1	6	1	0	0
P 953 PI-01 IN YOUR PRESENT JOB DO YOU WORK WITH TRANSMISSION LINES (TRANSMISSION LINES ARE DEFINED TO INCLUDE LEADS	4	0	5	3	0
P 954 PI-02 DO YOU REFER TO OR USE COPPER LOSS OR 12R LOSS IN TRANSMISSION LINES	0	0	0	0	0
P 955 PI-03 DO YOU REFER TO OR USE SKIN EFFECTS OF HIGH FREQUENCY CURRENTS IN TRANSMISSION LINES	0	0	0	0	0
P 956 PI-04 DO YOU REFER TO OR USE RADIATION LOSS IN TRANSMISSION LINES	0	0	0	0	0
P 957 PI-05 DO YOU USE OR REFER TO DIELECTRIC LOSS IN TRANSMISSION LINES	0	0	0	0	0
P 958 PI-06 DO YOU USE OR REFER TO LEAKAGE LOSSES IN TRANSMISSION LINES	0	0	0	0	0
P 959 PI-07 DO YOU WORK WITH TWISTED PAIR TRANSMISSION LINES	1	0	1	1	0
P 960 PI-08 DO YOU WORK WITH THIN LEAD TRANSMISSION LINES	1	0	1	1	0
P 961 PI-09 DO YOU WORK WITH OPEN TWO-WIRE TRANSMISSION LINES	1	0	2	1	0
P 962 PI-10 DO YOU WORK WITH FLEXIBLE COAXIAL CABLE TRANSMISSION LINES	3	0	3	3	0
P 963 PI-11 DO YOU WORK WITH RIGID COAXIAL CABLE TRANSMISSION LINES	1	0	1	0	0
P 964 PI-12 DO YOU TROUBLESHOOT TRANSMISSION LINES	1	0	2	1	0
P 965 PI-13 DO YOU ANALYZE VOLTAGE OR CURRENT WAVEFORMS IN TRANSMISSION LINES TO DETERMINE THE TYPE OF TERMINATION	0	0	1	0	0
P 966 PI-14 DO YOU SELECT APPROPRIATE TRANSMISSION LINES TERMINATIONS TO ACHIEVE DESIRED WAVEFORMS	0	0	0	0	0
P 967 PI-15 DO YOU USE OR REFER TO SCHEMATIC SYMBOLS FOR LINE TERMINATIONS IN TERMS OF CIRCUIT TERMINATIONS	0	0	0	1	0
P 968 PI-16 DO YOU MEASURE STANDING WAVE RATIOS (SWR) OF TRANSMISSION LINES	0	0	0	0	0
P 969 PI-17 DO YOU CALCULATE STANDING WAVE RATIOS (SWR) OF TRANSMISSION LINES	0	0	0	0	0
P 970 PI-18 DO YOU PERFORM THE CALCULATIONS NECESSARY TO DETERMINE THE IMPEDANCE AND LENGTH OF QUARTER - WAVELENGTH	0	0	0	0	0

TASK GROUP SUMMARY
PCL MHS MEMBERS PERFORMING

0-1-5-5-5	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005
P 971 P1-19 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING MATCHING TRANSFORMERS	0	0	1	0	0
P 972 P1-20 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING DELTA MATCHING	0	0	0	0	0
P 973 P1-21 DO YOU SELECT THE TYPE OF TRANSMISSION LINE NEEDED FOR PARTICULAR JOBS WITHOUT REFERRING TO TECHNICAL DATA	0	0	0	0	0
P 974 P1-22 DO YOU USE OR REFER TO THE TERM CHARACTERISTIC IMPEDANCE (Z01) OF TRANSMISSION LINES	0	0	0	1	0
P 975 P1-23 DO YOU CALCULATE THE CHARACTERISTIC IMPEDANCE (Z01) OF TRANSMISSION LINES	0	0	0	0	0
P 976 P1-24 DO YOU USE OR REFER TO THE TERM CUTOFF FREQUENCY OF TRANSMISSION LINES	0	0	0	0	0
P 977 P1-25 DO YOU USE OR REFER TO THE TERM VELOCITY FACTOR (K) OF TRANSMISSION LINES	0	0	0	0	0
P 978 P1-26 DO YOU COMPUTE THE ELECTRICAL LENGTH OF TRANSMISSION LINES FOR PARTICULAR FREQUENCIES	0	0	0	0	0
P 979 P1-27 DO YOU CONSTRUCT TRANSMISSION LINES OF PARTICULAR ELECTRICAL LENGTH FOR GIVEN FREQUENCIES	0	0	0	0	0
P 980 P1-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT AS THE FREQUENCY INCREASES AND THE PHYSICAL LENGTH OF	0	0	0	0	0
P 981 P1-29 DO YOU WORK WITH NONRESONANT (FLATT) TRANSMISSION LINES	1	0	1	1	0
P 982 P1-30 DO YOU WORK WITH RESONANT TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING STUB MATCHING	0	0	0	0	0
P 984 P2-01 DO YOU WORK WITH WAVEGUIDES OR CAVITY RESONATORS IN YOUR PRESENT JOB	23	6	26	23	10
P 985 P2-02 DO YOU INSPECT WAVEGUIDES OR CAVITY RESONATORS	23	6	26	23	10
P 986 P2-03 DO YOU CLEAN WAVEGUIDES OR CAVITY RESONATORS	17	6	20	15	10
P 987 P2-04 DO YOU BEND WAVEGUIDES OR CAVITY RESONATORS	5	0	6	4	0
P 988 P2-05 DO YOU TWIST WAVEGUIDES OR CAVITY RESONATORS	3	0	3	4	0
P 989 P2-06 DO YOU PRESSURIZE WAVEGUIDES OR CAVITY RESONATORS	1	0	1	1	0
P 990 P2-07 DO YOU PURGE WAVEGUIDES OR CAVITY RESONATORS	12	6	13	13	10
P 991 P2-08 DO YOU TROUBLESHOOT WAVEGUIDES OR CAVITY RESONATORS	5	0	6	6	0
P 992 P2-09 DO YOU REMOVE OR INSTALL COMPLETE WAVEGUIDES	17	6	21	13	10
P 993 P2-10 DO YOU REMOVE OR INSTALL WAVEGUIDE SECTIONS	7	6	7	8	0
P 994 P2-11 DO YOU REMOVE OR INSTALL DUMMY LOADS	1	6	1	1	0
P 995 P2-12 DO YOU REMOVE OR INSTALL H BENDS	0	0	1	0	0
P 996 P2-13 DO YOU REMOVE OR INSTALL H BENDS	0	0	1	0	0
P 997 P2-14 DO YOU REMOVE OR INSTALL OTHER BENDS	1	0	2	0	0
P 998 P2-15 DO YOU REMOVE OR INSTALL CHOKE JOINTS	0	0	0	0	0
P 999 P2-16 DO YOU REMOVE OR INSTALL ROTATING JOINTS	0	0	0	0	0
P1000 P2-17 DO YOU REMOVE OR INSTALL DIRECTIONAL COUPLERS	1	6	1	0	0
P1001 P2-18 DO YOU REMOVE OR INSTALL BI-DIRECTIONAL COUPLERS	0	0	1	0	0
P1002 P2-19 DO YOU USE OR REFER TO A WALL OF WAVEGUIDES	0	0	0	0	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DYN-TSK	SPL				
	DOI	002	003	004	005
P1003 P2-20 DO YOU USE OR REFER TO "H" WALL OF WAVEGUIDES	0	0	0	0	0
P1004 P2-21 DO YOU USE OR REFER TO CUTOFF FREQUENCY OF WAVEGUIDES	1	0	1	0	0
P1005 P2-22 DO YOU USE OR REFER TO FREQUENCY-DETERMINING WALL OF WAVEGUIDES	0	0	0	0	0
P1006 P2-23 DO YOU USE OR REFER TO POWER-DETERMINING WALL OF WAVEGUIDES	0	0	1	0	0
P1007 P2-24 DO YOU USE OR REFER TO ELECTRIC FIELD BOUNDARY CONDITIONS	0	0	0	0	0
P1008 P2-25 DO YOU USE OR REFER TO MAGNETIC FIELD BOUNDARY CONDITIONS	0	0	0	0	0
P1009 P2-26 DO YOU USE OR REFER TO DUPLAEX FIELD BOUNDARY CONDITIONS	0	0	0	0	0
P1010 P2-27 DO YOU USE OR REFER TO THE GENERAL RULE THAT MOST WAVEGUIDES ARE MADE WITH A "B" WALL SIZE OF .7 WAVELENGTHS	0	0	0	0	0
P1011 P2-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT MOST "H" WALLS RANGE FROM .2 TO .5 WAVELENGTHS IN SIZE, WITH .35	0	0	0	0	0
P1012 P2-29 ARE YOU CONCERNED WITH THE MATERIAL IS SUCH AS BRASS? WHICH WAVEGUIDES ARE MADE OF	1	0	1	1	0
P1013 P2-30 DO YOU COMPUTE THE LENGTH OF A WAVEGUIDE FOR SPECIFIC INSTALLATION	0	0	0	0	0
P1014 P2-31 DO YOU USE THE RIGHT HAND RULE TO DETERMINE THE DIRECTION OF PROPAGATION, DIRECTION OF "E" FIELD, OR PLIUS P2-32 DO YOU USE OR REFER TO THE TIME PHASE OF PEAK "E" OR "H" LINES IN WAVEGUIDES	0	0	0	0	0
P1016 P2-33 DO YOU MEASURE THE TIME PHASE OF "E" OR "H" LINES IN WAVEGUIDES	0	0	0	0	0
P1017 P2-34 DO YOU USE OR REFER TO THE SPACE QUADRATURE OF "E" OR "H" LINES IN WAVEGUIDES	0	0	0	0	0
P1018 P2-35 ARE HIGH POWER PROBES USED ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	0	0	0	0	0
P1019 P2-36 ARE LOW POWER PROBES USED ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	0	0	1	0	0
P1020 P2-37 ARE LOOPS USED ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	0	0	1	0	0
P1021 P2-38 ARE APERTURES (WINDOMS OR IRISES) USED ON WAVEGUIDES ON CAVITY RESONATORS YOU WORK WITH	9	0	9	11	0
P1022 P2-39 ARE DON'T REMEMBER THE KIND OF ENERGY COUPLING USED ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	5	0	4	10	0
P1023 P2-40 DO YOU DETERMINE WHERE PROBES SHOULD BE MOUNTED IN WAVEGUIDES OR CAVITY RESONATORS WITHOUT REFERRING TO	0	0	0	0	0
P1024 P2-41 DO YOU DETERMINE THE POSITIONING OF LOOPS IN WAVEGUIDES OR CAVITY RESONATORS WITHOUT REFERRING TO	0	0	0	0	0

TASK GROUP SUMMARY
PERF MEMBERS PERFORMING

QPSUMI	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005
P1025 P2-42 DO YOU DETERMINE THE POSITIONING OR SIZE OF APERTURES IN WAVEGUIDES OR CAVITY RESONATORS WITHOUT REFERRING TO	0	0	0	0	0
P1026 P2-43 ARE CHOKE JOINTS USED IN WAVEGUIDES OR CAVITY	1	0	0	3	0
P1027 P2-44 ARE ROTATING JOINTS USED IN WAVEGUIDES OR CAVITY	0	0	0	1	0
P1028 P2-45 ARE DON'T REMEMBER THE KIND OF JOINTS USED IN WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	7	0	6	7	0
P1029 P2-46 DO YOU TUNE CAVITY RESONATORS USING CAPACITIVE TUNING	1	0	1	1	0
P1030 P2-47 DO YOU TUNE CAVITY RESONATORS USING INDUCTIVE TUNING	1	0	0	3	0
P1031 P2-48 DC YOU TUNE CAVITY RESONATORS USING VOLUME TUNING	1	0	1	1	0
P1032 P2-49 DO YOU TUNE CAVITY RESONATORS USING DON'T REMEMBER THE METHOD OF TUNING	3	0	4	3	0
P1033 P2-50 DO YOU MEASURE THE FREQUENCY OF SIGNALS IN CAVITY RESONATORS	1	0	1	1	0
P1034 P3-01 IN YOUR PRESENT JOB DO YOU WORK WITH KLYSTRONS, TRAVELING WAVE TUBES (TWT), PARAMETRIC AMPLIFIERS, OR	5	0	6	4	0
P1035 P3-02 DO YOU USE OR REFER TO INTERELECTRODE CAPACITANCE	1	0	1	1	0
P1036 P3-03 DO YOU USE OR REFER TO ELECTRON TRANSIT TIME	0	0	1	0	0
P1037 P3-04 DO YOU USE OR REFER TO LFAD INDUCTANCE	0	0	1	0	0
P1038 P3-05 DO YOU USE OR REFER TO RF LOSSES IN EXTERNAL CIRCUITRY	1	0	2	1	0
P1039 P3-06 DO YOU USE OR REFER TO PRINCIPLE OF ELECTRON VELOCITY MODULATION	0	0	0	0	0
P1040 P3-07 DO YOU USE OR REFER TO ELECTRON BUNCHING	0	0	0	0	0
P1041 P3-08 DO YOU WORK WITH TWO-CAVITY KLYSTRONS	0	0	1	0	0
P1042 P3-09 DO YOU WORK WITH THREE-CAVITY KLYSTRONS	1	0	1	0	0
P1043 P3-10 DO YOU WORK WITH REFLEX KLYSTRONS	2	0	2	3	0
P1044 P3-11 DO YOU WORK WITH TRAVELING-WAVE TUBES (TWT)	0	0	1	0	0
P1045 P3-12 DO YOU WORK WITH NONDEGENERATIVE PARAMETRIC AMPLIFIERS	0	0	0	0	0
P1046 P3-13 DO YOU WORK WITH UP-CONVERTER PARAMETRIC AMPLIFIERS	0	0	0	0	0
P1047 P3-14 DO YOU WORK WITH MAGNETRONS	0	0	0	0	0
P1048 P3-15 DO YOU INSPECT KLYSTRONS OR TWT	1	0	2	1	0
P1049 P3-16 DO YOU CLEAN KLYSTRONS OR TWT	0	0	1	0	0
P1050 P3-17 DO YOU TUNE KLYSTRONS OR TWT ELECTRICALLY	1	0	2	0	0
P1051 P3-18 DO YOU TUNE KLYSTRONS OR TWT MECHANICALLY	2	0	3	0	0
P1052 P3-19 DO YOU PERFORM OPERATIONAL CHECKS OF KLYSTRONS OR TWT	1	0	2	0	0
P1053 P3-20 DO YOU TROUBLESHOOT KLYSTRONS OR TWT	0	0	0	0	0
P1054 P3-21 DO YOU REMOVE OR REPLACE COMPLETE KLYSTRON OR TWT	1	0	1	0	0
P1055 P3-22 DO YOU REMOVE OR REPLACE KLYSTRON OR TWT COMPONENTS	0	0	1	0	0
P1056 P3-23 DO YOU INSPECT PARAMETRIC AMPLIFIERS	0	0	0	0	0
P1057 P3-24 DO YOU CLEAN PARAMETRIC AMPLIFIERS	0	0	0	0	0
P1058 P3-25 DO YOU ADJUST PARAMETRIC AMPLIFIERS	0	0	0	0	0

**TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING**

			SPL 003	SPL 002	SPL 001	SPL 004	SPL 005	SPL 004	SPL 003
P1069	P3-26	DO YOU TUNE PARAMETRIC AMPLIFIERS	0	0	0	0	0	0	0
P1060	P3-27	DO YOU PERFORM OPERATIONAL CHECKS OF PARAMETRIC AMPLIFIERS	0	0	0	0	0	0	0
P1061	P3-28	DO YOU TROUBLESHOOT PARAMETRIC AMPLIFIERS	0	0	0	0	0	0	0
P1062	P3-29	DO YOU REMOVE OR REPLACE COMPLETE PARAMETRIC AMPLIFIERS	0	0	0	0	0	0	0
P1063	P3-30	DO YOU REMOVE OR REPLACE PARAMETRIC AMPLIFIER COMPONENTS	0	0	0	0	0	0	0
P1064	P3-31	DO YOU INSPECT MAGNETRONS	0	0	0	0	0	0	0
P1065	P3-32	DO YOU CLEAN MAGNETRONS	0	0	0	0	0	0	0
P1066	P3-33	DO YOU ADJUST MAGNETRONS	0	0	0	0	0	0	0
P1067	P3-34	DO YOU TUNE MAGNETRONS	0	0	0	0	0	0	0
P1068	P3-35	DO YOU PERFORM OPERATIONAL CHECKS OF MAGNETRONS	0	0	0	0	0	0	0
P1069	P3-36	DO YOU TROUBLESHOOT MAGNETRONS	0	0	0	0	0	0	0
P1070	P3-37	DO YOU REMOVE OR REPLACE COMPLETE MAGNETRON	0	0	0	0	0	0	0
P1071	P3-38	DO YOU REMOVE OR REPLACE MAGNETRON COMPONENTS	0	0	0	0	0	0	0
P1072	P3-39	DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS	0	0	0	0	0	0	0
P1073	P3-40	DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS CATCHER CAVITIES	0	0	0	0	0	0	0
P1074	P3-41	DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS DRIFT SPACES	0	0	0	0	0	0	0
P1075	P3-42	DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS FEEDBACK LOOPS	0	0	1	0	0	0	0
P1076	P3-43	DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS CATCHER GRIDS	0	0	0	0	0	0	0
P1077	P3-44	DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS RUNCHER GRIDS	0	0	0	0	0	0	0
P1078	P3-45	DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS RUNCHER CAVITIES	0	0	0	0	0	0	0
P1079	P3-46	DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS CONTROL GRIDS	0	0	0	0	0	0	0
P1080	P3-47	DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS CATHODES	0	0	0	0	0	0	0
P1081	P3-48	DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRONS REPELLER (REFLECTOR) PLATES	1	0	1	3	0	0	0
P1082	P3-49	DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRONS GAPS	1	0	1	3	0	0	0
P1083	P3-50	DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRONS GRID CAVITY GAPS	1	0	1	1	0	0	0
P1084	P3-51	DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRONS RESONANT CAVITIES	1	0	1	3	0	0	0
P1085	P3-52	DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRONS MAGNETIC COUPLING LOOPS	0	0	0	0	0	0	0
P1086	P3-53	DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRONS FILMMENTS	1	0	1	1	0	0	0
P1087	P3-54	DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRONS CATHODES	0	0	0	1	0	0	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

Dy-15A

SPL SPL SPL SPL
001 002 003 004
005

PI088 P-55 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON OUTPUT LEADS	1	0	1	3	0
PI089 P-56 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES FILAMENTS	0	0	0	0	0
PI090 P-57 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES CATHODES	0	0	0	0	0
PI091 P-58 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES MODULATOR GRIDS	0	0	0	0	0
PI092 P-59 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES ANODES	0	0	0	0	0
PI093 P-60 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES HELIXES	0	0	0	0	0
PI094 P-61 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES COLLECTORS	0	0	0	0	0
PI095 P-62 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES MAGNETS	0	0	0	0	0
PI096 P-63 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES ATTENATORS	0	0	0	0	0
PI097 P-64 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER FERRITE CIRCULATORS	0	0	0	0	0
PI098 P-65 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER SIGNAL CAVITIES	0	0	0	0	0
PI099 P-66 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER IDLE CAVITIES	0	0	0	0	0
PI100 P-67 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER VARACTOR DIODES	0	0	0	0	0
PI101 P-68 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER FERRITE ISOLATORS	0	0	0	0	0
PI102 P-69 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER REVERSE- BIAS BATTERIES	0	0	0	0	0
PI103 P-70 DO YOU PERFORM TASKS ON ANODES	0	0	0	0	0
PI104 P-71 DO YOU PERFORM TASKS ON ANODE COOLING PINS	0	0	0	0	0
PI105 P-72 DO YOU PERFORM TASKS ON COUPLING LOOPS	0	0	0	0	0
PI106 P-73 DO YOU PERFORM TASKS ON HEATER LEADS	0	0	0	0	0
PI107 P-74 DO YOU PERFORM TASKS ON RESONANT CAVITIES	0	0	0	0	0
PI108 P-75 DO YOU PERFORM TASKS ON CATHODES	0	0	0	0	0
PI109 P-76 DO YOU PERFORM TASKS ON MAGNETS	0	0	0	0	0
PI110 P-77 DO YOU USE OR REFER TO STORAGE REGISTERS	0	0	0	0	0
PI111 P-78 DO YOU USE OR REFER TO SHIFT REGISTERS	0	0	1	0	0
PI112 P-79 DO YOU USE OR REFER TO LOGIC SYMBOLS OF SHIFT REGISTERS	0	0	0	0	0
PI113 P-80 DO YOU USE OR REFER TO LOGIC SYMBOLS OF STORAGE REGISTERS	0	0	0	0	0
PI114 P-81 DO YOU TRACE THE DATA FLOW THROUGH LOGIC DIAGRAMS OF SHIFT REGISTERS	1	0	1	0	0
PI115 P-82 DO YOU TRACE THE DATA FLOW THROUGH LOGIC DIAGRAMS OF OTHER TYPE OF REGISTERS	0	0	1	0	0

FCT MHS PERF TASKS BY DAFSC GROUPS
 TASK GROUP SUMMARY
 PERCENT MEMBERS PERFORMING

GPSUM PAGE 42

AF HUMAN RESOURCES LABORATORY
 AIR FORCE SYSTEMS COMMAND

Q116	Q1-07 DO YOU DETERMINE THE STATE OF EACH FLIP-FLOP OF A SHIFT REGISTER AFTER A SPECIFIED NUMBER OF SHIFT PULSES	2	0	3	0	0	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005
Q117	Q2-01 DO YOU WORK WITH DIGITAL COUNTERS, REGISTERS, OR STORAGE DEVICES IN YOUR PRESENT JOB	4	0	6	3	0					
Q118	Q2-02 DO YOU USE OR REFER TO DELAY LINES	0	0	0	0	0					
Q119	Q2-03 DO YOU USE OR REFER TO MAGNETIC CORES	0	0	0	0	0					
Q120	Q2-04 DO YOU USE OR REFER TO MAGNETIC DRUMS	0	0	0	0	0					
Q121	Q2-05 DO YOU USE OR REFER TO MAGNETIC TAPES	0	0	0	0	0					
Q122	Q2-06 DO YOU USE OR REFER TO ACCESS TIME OR SPEED OF MEMORY SYSTEMS	1	0	1	0	0					
Q123	Q2-07 DO YOU USE OR REFER TO WORD CAPACITY OF MEMORY SYSTEMS	0	0	0	0	0					
Q1124	Q2-08 DO YOU USE OR REFER TO VOLATILITY OF MEMORY SYSTEMS	0	0	0	0	0					
Q1125	Q2-09 DO YOU USE OR REFER TO LOGIC SYMBOL OF DELAY LINES	0	0	0	0	0					
Q1126	Q3-01 IN YOUR PRESENT JOB, DO YOU WORK WITH DIGITAL-TO-DIGITAL (D/A) CONVERTERS, ANALOG-TO-DIGITAL (A/D)	0	0	0	0	0					
Q1127	Q3-02 DO YOU COMPUTE OUTPUT VOLTAGES FOR ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A) CONVERTERS FOR GIVEN INPUT	0	0	0	0	0					
Q1128	Q3-03 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE COUNT IN ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A)	0	0	0	0	0					
Q1129	Q3-04 DO YOU COMPUTE ANALOG VOLTAGES FOR GIVEN BINARY COUNTS IN ELECTRONIC DIGITAL-TO-ANALOG (D/A) CONVERTERS	0	0	0	0	0					
Q1130	Q3-05 DO YOU PERFORM SAMPLE FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS	0	0	0	0	0					
Q1131	Q3-06 DO YOU PERFORM HOLD FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS	0	0	0	0	0					
Q1132	Q3-07 DO YOU PERFORM COMPARE FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS	0	0	0	0	0					
Q1133	Q3-08 DO YOU PERFORM DIGITIZE FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS	0	0	0	0	0					
Q1134	Q3-09 DO YOU PERFORM DON'T REMEMBER WHICH FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER	0	0	0	1	0					
Q1135	Q3-10 DO YOU USE OR REFER TO SAMPLE FUNCTION OF A/D CONVERTERS	0	0	0	0	0					
Q1136	Q3-11 DO YOU USE OR REFER TO HOLD FUNCTION OF A/D CONVERTERS	0	0	0	0	0					
Q1137	Q3-12 DO YOU USE A REFER TO COMPARE FUNCTION OF A/D CONVERTERS	0	0	0	0	0					
Q1138	Q3-13 DO YOU USE OR REFER TO DIGITAL FUNCTION OF A/D CONVERTERS	0	0	0	0	0					
Q1139	Q3-14 DO YOU PERFORM ANY TASKS ON MECHANICAL ANALOG-TO-DIGITAL (A/D) CONVERTERS	0	0	0	0	0					

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DY-TSK	SPL 001	SPL 002	SPL 003	SPL 004	SPL 005	
K1140 K1-01 DO YOU WORK WITH PHANTASTRON CIRCUITRY IN YOUR PRESENT JOB		0	0	1	0	0	PHANTASTRONS
K1141 R2-01 IN YOUR PRESENT JOB DO YOU WORK WITH SCHMITT TRIGGERS		0	0	0	0	0	SCHMITT TRIGGERS
K1142 R2-02 DO YOU TRACE DATA FLUX THROUGH SCHMITT TRIGGER SCHEMATIC DIAGRAMS		0	0	0	0	0	
K1143 R2-03 DO YOU USE OR REFER TO SCHMITT TRIGGER LOGIC SYMBOLS		0	0	0	0	0	
K1144 R3-01 IN YOUR PRESENT JOB DO YOU FABRICATE MULTICONDUCTOR CABLES		7	6	7	8	0	CABLE FABRICATION
K1145 R3-02 DO YOU FABRICATE COAXIAL CABLES		16	13	14	20	30	
K1146 SJ-01 IN YOUR PRESENT JOB DO YOU PERFORM ANY TASKS ON VISUAL READOUT SYSTEMS		13	14	15	6	10	
K1147 SJ-02 DO YOU PERFORM ANY TASKS ON NIXIE LIGHTS OR NIXIE LIGHT DECODER SYSTEMS		2	0	1	3	10	
K1148 SJ-03 DO YOU ANALYZE NIXIE LIGHT DECODER SYSTEMS USING BOOLEAN ALGEBRA		0	0	0	0	0	
K1149 SJ-04 DO YOU WORK WITH PHOTO TUBES IN YOUR PRESENT JOB		2	0	2	4	0	
K1150 SJ-05 DO YOU WORK WITH CHOPPER CIRCUITS		0	0	1	0	0	PHOTO SENSITIVE DEVICES
K1151 SJ-06 DO YOU MEASURE EXCITATION FREQUENCIES		0	0	0	0	0	
K1152 SJ-07 DO YOU MEASURE VOLTAGE-CURRENT PHASE RELATIONSHIPS		0	0	0	0	0	
K1153 SJ-08 DO YOU USE OR REFER TO EXCITATION FREQUENCIES		0	0	0	0	0	
K1154 SJ-09 DO YOU USE OR REFER TO VOLTAGE-CURRENT PHASE RELATIONSHIPS		0	0	0	0	0	
K1155 SJ-06 DO YOU USE SERVOS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION		0	0	1	0	0	
K1156 SJ-07 DO YOU USE DETECTORS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION		0	0	1	0	0	
K1157 SJ-08 DO YOU USE ERROR SIGNAL DEVICES IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION		0	0	1	0	0	
K1158 SJ-09 DO YOU USE COMPARISON CIRCUITS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION		0	0	1	0	0	
K1159 T1-01 DOES YOUR PRESENT JOB INVOLVE ANY TASKS DEALING WITH INFRARED SYSTEMS		39	50	40	38	30	
T1160 T1-02 DO YOU INSPECT INFRARED SYSTEMS		32	25	34	32	20	
T1161 T1-03 DO YOU CLEAN INFRARED SYSTEMS		28	25	30	25	20	
T1162 T1-04 DO YOU ADJUST OR CALIBRATE INFRARED SYSTEMS		19	19	21	18	0	INFRARED
T1163 T1-05 DO YOU OPERATE INFRARED SYSTEMS		27	25	29	25	0	
T1164 T1-06 DO YOU TROUBLESHOOT WIRE CONNECTIONS OF INFRARED SYSTEMS		10	6	10	13	0	
T1165 T1-07 DO YOU TROUBLESHOOT MAJOR ASSEMBLIES OF INFRARED SYSTEMS		14	0	13	20	20	
T1166 T1-08 DO YOU TROUBLESHOOT DOWN TO INFRARED SYSTEM COMPONENT PARTS		5	0	6	4	10	
T1167 T1-09 DO YOU REMOVE OR REPLACE MAJOR ASSEMBLIES OF INFRARED SYSTEMS		15	6	14	21	20	
T1168 T1-10 DO YOU REMOVE OR REPLACE INFRARED SYSTEM COMPONENT PARTS		4	0	4	6	0	

Dy-Tsk	SPL				
	001	002	003	004	005
T1169 T1-11 DO YOU USE OR REFER TO FAR REGION	1	0	1	1	0
T1170 T1-12 DO YOU USE OR REFER TO INTERMEDIATE REGION	1	0	1	1	0
T1171 T1-13 DO YOU USE OR REFER TO NEAR REGION	1	0	2	1	0
T1172 T1-14 DO YOU USE OR REFER TO MICRON	1	0	1	1	0
T1173 T1-15 DO YOU USE OR REFER TO GRAY BODIES	1	0	1	1	0
T1174 T1-16 DO YOU USE OR REFER TO BLACK BODIES	2	0	1	6	0
T1175 T1-17 DO YOU USE OR REFER TO ABSORPTION	2	6	1	3	0
T1176 T1-18 DO YOU USE OR REFER TO SCATTERING	1	4	1	1	0
T1177 T1-19 DO YOU USE OR REFER TO ABSOLUTE ZERO	0	0	1	0	0
T1178 T1-20 DO YOU PERFORM TASKS ON ABSOLUTE BLITZ	0	0	0	0	0
T1179 T1-21 DO YOU PERFORM TASKS ON TARGET BUTTONS	0	0	0	1	0
T1180 T1-22 DO YOU PERFORM TASKS ON FERCTOR LENSES	0	0	0	1	0
T1181 T1-23 DO YOU PERFORM TASKS ON OCULAR LENSES	2	4	2	1	0
T1182 T1-24 DO YOU PERFORM TASKS ON CORRECTION LENSES	1	0	1	1	0
T1183 T1-25 DO YOU PERFORM TASKS ON FILTERS	1	0	1	1	10
T1184 T1-26 DO YOU PERFORM TASKS ON SPHERICAL MIRRORS	2	0	2	6	0
T1185 T1-27 DO YOU PERFORM TASKS ON PLANE MIRRORS	2	0	1	6	0
T1186 T2-01 DOES YOUR PRESENT JOB INVOLVE ANY TASKS DEALING WITH LASERS	27	31	29	23	30
T1187 T2-02 DO YOU INSPECT LASER SYSTEMS	24	25	26	21	20
T1188 T2-03 DO YOU CLEAN LASER SYSTEMS	19	25	22	11	10
T1189 T2-04 DO YOU OPERATE LASER SYSTEMS	18	6	21	11	20
T1190 T2-05 DO YOU OPERATE LASER SYSTEMS	17	6	21	10	20
T1191 T2-06 DO YOU TROUBLESHOOT WIRE CONNECTIONS OF LASER SYSTEMS	5	0	7	3	10
T1192 T2-07 DO YOU TROUBLESHOOT MAJOR ASSEMBLIES OF LASER SYSTEMS	14	6	13	14	30
T1193 T2-08 DO YOU TROUBLESHOOT TO COMPONENT PARTS OF LASER SYSTEMS	8	6	9	6	10
T1194 T2-09 DO YOU REMOVE OR REPLACE MAJOR ASSEMBLIES OF LASER SYSTEMS	13	13	12	13	30
T1195 T2-10 DO YOU REMOVE OR REPLACE COMPONENT PARTS OF LASER SYSTEMS	5	0	5	4	10
T1196 T2-11 DO YOU USE OR REFER TO ANGSTROMS (A)	0	0	1	0	0
T1197 T2-12 DO YOU USE OR REFER TO ELECTRON ENERGY LEVELS	0	0	0	1	0
T1198 T2-13 DO YOU USE OR REFER TO GROUND STATE	0	0	0	1	0
T1199 T2-14 DO YOU USE OR REFER TO EXCITED STATE	0	0	0	1	0
T1200 T2-15 DO YOU USE OR REFER TO PACKET OF RADIATION	0	0	1	0	0
T1201 T2-16 DO YOU USE OR REFER TO PHOTONS	0	0	1	0	0
T1202 T2-17 DO YOU USE OR REFER TO SPONTANEOUS EMISSION	0	0	0	1	0
T1203 T2-18 DO YOU USE OR REFER TO STIMULATED EMISSION	0	0	0	1	0
T1204 T2-19 DO YOU USE OR REFER TO COHERENCE OR INCOHERENCE	0	0	1	0	0
T1205 T2-20 DO YOU USE OR REFER TO INVERSION LEVEL	0	0	1	0	0
T1206 T2-21 DO YOU USE OR REFER TO MONOCHROMATIC	0	0	0	0	0
T1207 T2-22 DO YOU WORK WITH ACTIVE MATERIALS	0	0	0	0	0
T1208 T2-23 DO YOU WORK WITH PUMPING SOURCES	1	0	1	1	0
T1209 T2-24 DO YOU WORK WITH FULL SILVERED (100% REFLECTIVE) MIRRORS	0	0	0	0	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DFTSK	SPL			
	SPL 001	SPL 002	SPL 003	SPL 004
T1210 T2-25 DO YOU WORK WITH HALF SILVERED (92% REFLECTIVE) MIRRORS	0	0	1	0
T1211 T2-26 DO YOU WORK WITH HELICAL FLASHTUBES	1	0	2	0
T1212 T2-27 DO YOU WORK WITH RUBY	0	0	1	0
T1213 T2-28 DO YOU WORK WITH HELIUM-NEON	0	6	0	0
T1214 T2-29 DO YOU WORK WITH HELIUM-XENON	0	0	1	0
T1215 T2-30 DO YOU WORK WITH XENON	0	0	0	0
T1216 T2-31 DO YOU WORK WITH CESIUM-HELITUM	0	0	0	0
T1217 T2-32 DO YOU WORK WITH ARGON	1	4	1	10
T1218 T2-33 DO YOU WORK WITH NEONIUM IN GLASS	0	0	0	0
T1219 T2-34 DO YOU WORK WITH GALLIUM ARSENIDE	0	0	0	0
T1220 T3-01 IN YOUR PRESENT JOB DO YOU WORK WITH DISPLAY TUBES, SUCH AS DIRECT VIEW STORAGE (DVST) OR MULTIPLE MODE	1	0	1	0
T1221 T3-02 DO YOU INSPECT DVST OR HMST	1	0	1	0
T1222 T3-03 DO YOU CLEAN DVST OR HMST	1	0	0	0
T1223 T3-04 DO YOU ADJUST OR CALIBRATE DVST OR HMST	0	0	0	0
T1224 T3-05 DO YOU OPERATE SYSTEMS THAT CONTAIN DVST OR HMST	1	0	2	0
T1225 T3-06 DO YOU TROUBLESHOOT DVST OR HMST	0	0	0	0
CIRCUITS				
T1226 T3-07 DO YOU REMOVE OR REPLACE DVST OR HMST TUBES FROM MAJOR ASSEMBLIES OR UNITS	0	0	0	0
T1227 T3-08 DO YOU PERFORM TASKS THAT MAKE IT NECESSARY TO NAME THE VARIOUS ELEMENTS OF DVST	0	0	0	0
T1228 T3-09 DO YOU PERFORM TASKS THAT MAKE IT NECESSARY TO NAME THE VARIOUS ELEMENTS OF HMST	0	0	0	0
T1229 T3-10 DO YOU PERFORM TASKS ON FLUO GUNS	0	0	0	0
T1230 T3-11 DO YOU PERFORM TASKS ON WRITE GUNS	0	0	0	0
T1231 T3-12 DO YOU PERFORM TASKS ON ATTACK GUNS	0	0	0	0
T1232 T3-13 DO YOU PERFORM TASKS ON ERASE GUNS	0	0	0	0
T1233 T3-14 DO YOU PERFORM TASKS ON STORAGE GRIDS	0	0	0	0
T1234 T3-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY PROGRAMMING	0	0	1	0
TASKS				
U1235 U1-02 DO YOU USE OR REFER TO DECIMAL SYSTEMS	0	0	0	0
U1236 U1-03 DO YOU USE OR REFER TO PROGRAMS	0	0	0	0
U1237 U1-04 DO YOU USE OR REFER TO HEXADECIMAL SYSTEMS	0	0	0	0
U1238 U1-05 DO YOU USE OR REFER TO 8-4-2-1 SYSTEMS	0	0	0	0
U1239 U1-06 DO YOU USE OR REFER TO FOUR SYSTEMS	0	0	0	0
U1240 U1-07 DO YOU USE OR REFER TO BINARY SYSTEMS	0	0	0	0
U1241 U1-08 DO YOU USE OR REFER TO TIME-SHARING	0	0	0	0
U1242 U1-09 DO YOU USE OR REFER TO DATA WORDS	0	0	0	0
U1243 U1-10 DO YOU USE OR REFER TO ADDRESS WORDS	0	0	0	0
U1244 U1-11 DO YOU USE OR REFER TO ADDRESS/SUBADDRESS	0	0	0	0
U1245 U1-12 DO YOU USE OR REFER TO STEERING/INFORMATION WORDS	0	0	0	0
U1246 U1-13 DO YOU USE OR REFER TO INFORMATION WORDS	0	0	0	0
U1247 U1-14 DO YOU PERFORM TASKS ON SINGLE LEVEL PROGRAMMING	0	0	0	0
U1248 U1-15 DO YOU PERFORM TASKS ON MULTILEVEL PROGRAMMING	0	0	0	0

PCT MHS PERFS TASKS BY CAFSC GRPS
 TASK GROUP SUMMARY
 PERCENT MEMBERS PERFORMING

UPSUMI PAGE 46 AF HUMAN RESOURCES LABORATORY
 AIR FORCE SYSTEMS COMMAND

DYN-TSK	SPL			
	001	002	003	004
U1249 U1-16 DO YOU PERFORM TASKS ON INPUT DEVICES	0	0	1	0
U1250 U1-17 DO YOU PERFORM TASKS ON STORAGE DEVICES	0	0	0	0
U1251 U1-18 DO YOU PERFORM TASKS ON ARITHMETIC SECTIONS	0	0	0	0
U1252 U1-19 DO YOU PERFORM TASKS ON CONTROL SECTIONS	0	0	1	0
U1253 U1-20 DO YOU PERFORM TASKS ON OUTPUT DEVICES	0	0	0	0
U1254 U1-21 DO YOU PERFORM TASKS ON POWER SUPPLIES	0	0	0	0
U1255 U2-01 DO YOU USE DECIBELS TO EXPRESS AMPLIFICATION AND ATTENUATION	4	3	2	10
U1256 U2-02 DO YOU USE LOGARITHMS TO COMPUTE OUTPUT POWER IN DECIBELS	0	0	1	0
U1257 U2-03 DO YOU USE LOGARITHMS TO COMPUTE ATTENUATION IN DECIBELS	0	0	1	0
U1258 U2-04 DUMMY TASK TO IDENTIFY DOCUMENTS WHO PERFORMED NO TASKS	5	6	3	10

REPORTS OF PERCENT MEMBERS PERFORMING TASKS AND DUTIES BY AFMS GROUPS
IN THE 1001-1043 CARTRIDGE FIRING

REPORTS IN THE FOLLOWING GROUPS ARE REQUESTED

GROUP	IDENTITY	SP1006	ALL OS ANN WITH 6-24 MOS IN CAR FLD	CONTAINING 56 MEMBERS.
GROUP	IDENTITY	SP1007	ALL OS ANN WITH 25-48 MOS IN CAR FLD	CONTAINING 110 MEMBERS.
GROUP	IDENTITY	SP1008	ALL OS ANN WITH 1-48 MOS IN CAR FLD	CONTAINING 172 MEMBERS.
GROUP	IDENTITY	SP1009	ALL OS ANN WITH 49-96 MOS IN CAR FLD	CONTAINING 44 MEMBERS.
GROUP	IDENTITY	SP1010	ALL OS ANN WITH 97-144 MOS IN CAR FLD	CONTAINING 28 MEMBERS.
GROUP	IDENTITY	SP1011	ALL OS ANN WITH 145 OR MORE MOS IN CAR FLD	CONTAINING 35 MEMBERS.

PCT MHSN PERCENT OF AFHS GROUPS
 UNIT GROUP SUMMARY
 PERCENT MEMBERS PERFORMING

DUTY	SPL			SPL			SPL			SPL		
	006	007	008	009	010	011	006	007	008	009	010	011
A MATHEMATICS, DIRECT CURRENT, VOLTAGE, AND RESISTANCE	91	90	90	86	82	80						
B MULTIMETER USES, ALTERNATING CURRENT, INDUCTIVE CAPACITORS, CAPACITIVE REACTANCE, TRANSFORMERS, AND MAGNETISM	88	92	90	82	79	74						
C HCL CIRCUITS, SERIES AND PARALLEL RESONANCE (TIME CONSTANTS), AND FILTERS	48	37	41	36	36	43						
D HCL CIRCUITS, SERIES AND PARALLEL RESONANCE (TIME CONSTANTS), AND FILTERS	5	9	8	9	14	20						
E COUPLING, SOLDERING, AND RELAYS	30	40	35	43	46	51						
F MICROPHONES, SPEAKERS, AND OSCILLOSCOPES	52	62	58	61	46	46						
G SEMICONDUCTOR DIODES, TRANSISTORS, AND TRANSISTOR AMPLIFIERS	7	15	12	18	29	37						
H SOLID STATE SPECIAL PURPOSE DEVICES, POWER SUPPLIES, AND OSCILLATORS	55	49	51	59	50	49						
I MULTIVIBRATORS, LIMITERS, CLAMPERS, AND ELECTRON TUBES	0	5	3	5	14	17						
J ELECTRON TUBE AMPLIFIERS AND CIRCUITS, SPECIAL PURPOSE ELECTRON TUBES, HETERODYNING, MODULATION, AM SYSTEMS, FM SYSTEMS, AND NUMBERING SYSTEMS	14	10	11	9	7	9						
K LOGIC FUNCTIONS, BOOLEAN EQUATIONS, AND COUNTERS	4	6	5	0	7	11						
L TIMING CIRCUITS, USE OF SIGNAL GENERATORS, MOTORS, AND GENERATORS	21	29	26	20	29	14						
M METER MOVEMENTS, SATURABLE REACTORS, MAGNETIC AMPLIFIERS, AND WAVE SHAPING CIRCUITS	48	59	55	52	54	49						
N SINGLE SIDEBAND SYSTEMS, PULSE MODULATION SYSTEMS, AND ANTENNAS	55	67	64	43	54	54						
P TRANSMISSION LINES, WAVEGUIDES AND CAVITY RESONATORS, AND MICROWAVE AMPLIFIERS AND OSCILLATORS	43	38	40	20	11	20						
Q REGISTERS, STORAGE DEVICES, AND DIGITAL TO ANALOG CONVERTERS	27	34	30	16	29	14						
R PHANTASTRONS, SCHMITT TRIGGERS, AND CABLE FABRICATION	5	11	9	5	4	3						
S INPUT/OUTPUT DEVICES, PHOTO SENSITIVE DEVICES, AND SYNCHRONOUS VIBRATIONS	11	17	15	14	21	23						
T INFRARED, LASERS, AND DISPLAY TUBES	18	15	16	14	7	6						
U PROGRAMMING, DB AND POWER RATIOS	55	53	53	39	43	51						
	5	7	7	14	18	17						

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DY-TASK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
A 1 AL-01 IN YOUR PRESENT JOB, DO YOU USE INSTRUMENTS, SUCH AS METERS OR OSCILLOSCOPES, IN WHICH IT IS NECESSARY TO	54	49	49	45	43	44
A 2 AL-02 DO YOU USE PUBLICATIONS, SUCH AS A TECHNICAL ORDERS OR MAINTENANCE MANUALS, IN WHICH IT IS NECESSARY FOR YOU	27	25	25	32	14	17
A 3 AL-03 DO YOU REARRANGE THE SQUARE ROOT OF A QUANTITY.	11	13	12	16	4	20
A 4 AL-04 DO YOU CALCULATE THE SQUARE ROOT OF A QUANTITY.	10	1	1	2	0	9
A 5 AL-05 DO YOU SOLVE FOR UNKNOWN QUANTITIES.	13	14	13	5	4	17
A 6 AL-06 DO YOU CONVERT NUMBERS TO LOGARITHMS.	0	0	0	0	0	0
A 7 AL-07 DO YOU USE LOGARITHM TABLES IN ANY TYPE OF CALCULATIONS.	0	0	0	0	0	3
A 8 AL-08 DO YOU SOLVE QUADRATIC EQUATIONS.	0	1	1	0	0	3
A 9 AL-09 DO YOU USE THE NATURAL SYSTEM OF LOGARITHMS.	0	0	0	0	0	0
A 10 AL-10 DO YOU PERFORM CALCULATIONS ON VECTOR QUANTITIES.	0	0	0	0	0	6
A 11 AL-11 DO YOU WORK WITH TRIGONOMETRIC FUNCTIONS SUCH AS SINE, COSINE, OR TANGENT.	0	0	0	0	0	0
A 12 AL-12 DO YOU DETERMINE AREAS OF PLANE FIGURES.	0	1	1	0	0	3
A 13 AL-13 DO YOU SOLVE OR USE SIMULTANEOUS EQUATIONS.	4	3	3	0	4	6
A 14 AL-14 DO YOU SOLVE OR USE PROPORTIONS.	2	5	4	9	4	9
A 15 A2-01 DO YOU USE THE TERM VOLTAGE OR VOLT (V)?	80	83	81	80	79	77
A 16 A2-02 DO YOU USE THE TERM ELECTROMOTIVE FORCE (EMF)?	18	13	15	20	14	37
A 17 A2-03 DO YOU USE THE TERM OHM?	77	84	81	77	82	77
A 18 A2-04 DO YOU USE THE TERM ION?	0	2	1	5	7	14
A 19 A2-05 DO YOU USE THE TERM DIPOLE?	0	3	2	5	0	9
A 20 A2-06 DO YOU USE THE TERM AMPERE?	59	62	59	61	64	69
A 21 A2-07 DO YOU USE THE TERM NEUTRON?	0	3	2	7	4	11
A 22 A2-08 DO YOU USE THE TERM COULOMB?	2	3	2	2	4	9
A 23 A2-09 DO YOU USE THE TERM PHOTON?	0	2	1	9	4	11
A 24 A3-01 DO YOU WORK WITH RESISTORS IN YOUR PRESENT JOB.	41	43	41	45	39	40
A 25 A3-02 DO YOU INSPECT RESISTORS?	21	21	20	32	29	31
A 26 A3-03 DO YOU CLEAN RESISTORS?	11	7	8	16	14	20
A 27 A3-04 DO YOU ADJUST RESISTORS?	32	40	37	41	32	40
A 28 A3-05 DO YOU CHECK OHMIC VALUE OF RESISTORS?	32	25	27	32	43	34
A 29 A3-06 DO YOU REMOVE OR REPLACE RESISTORS?	16	14	14	20	21	29
A 30 A3-07 DO YOU USE OR REFER TO TEMPERATURE COEFFICIENTS FOR RESISTORS ON ANY TASKS YOU PERFORM?	5	3	3	0	4	6
A 31 A3-08 DO YOU USE OR REFER TO RESISTOR SYMBOLS SUCH AS FIXED RESISTOR SYMBOLS OR TAPPED RESISTOR SYMBOLS?	21	19	19	30	32	51
A 32 A3-09 DO YOU IDENTIFY OR CLASSIFY THE RESISTORS YOU WORK WITH AS CARBON, FIXED WIRE, SLIDE TAP, RHEOSTAT, OR	20	21	20	25	32	43
A 33 A3-10 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE OHMIC VALUE OF RESISTANCE?	23	16	18	23	25	37

D/T-TSK	SPL			SPL			SPL			SPL		
	QD6	QD7	QUB									
A 34 A3-11 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE TOLERANCE.	18	11	13	18	25	31						
A 35 A3-12 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE FAILURE RATE.		7	4	5	5	4						
A 36 A3-13 DO YOU MAKE DECISIONS IN WHICH YOU MUST DETERMINE HOW TWO OR MORE BATTERIES MUST BE CONNECTED TOGETHER TO REPRESENT BATTERIES, FUSES, CONDUCTORS, LAMPS, OR SWITCHES	5	6	6	0	0	4	14	29	27	32	39	51
A 37 A3-14 DO YOU USE OR REFER TO THE SCHEMATIC SYMBOLS WHICH REPRESENT RESISTIVE CIRCUITS.								14	10	11	11	17
A 38 A3-15 DO YOU CALCULATE TOTAL RESISTANCE FOR SERIES RESISTIVE CIRCUITS.								7	8	8	11	7
A 39 A3-16 DO YOU CALCULATE TOTAL CURRENT FOR SERIES RESISTIVE CIRCUITS.												
A 40 A3-17 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROPS FOR SERIES RESISTIVE CIRCUITS.		9	7	8	11	7	17					
A 41 A3-18 DO YOU CALCULATE POWER DISSIPATION FOR SERIES RESISTIVE CIRCUITS.			5	5	5	0	11					
A 42 A3-19 DO YOU CALCULATE TOTAL RESISTANCE FOR SERIES PARALLEL RESISTIVE CIRCUITS.				11	9	9	7	14				
A 43 A3-20 DO YOU CALCULATE TOTAL CURRENT FOR SERIES PARALLEL RESISTIVE CIRCUITS.			5	7	4	9	7	14				
A 44 A3-21 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROPS FOR SERIES PARALLEL RESISTIVE CIRCUITS.			5	7	6	9	7	14				
A 45 A3-22 DO YOU CALCULATE INDIVIDUAL BRANCH CURRENTS FOR SERIES PARALLEL RESISTIVE CIRCUITS.				7	5	6	9	7	11			
A 46 A3-23 DO YOU CALCULATE POWER DISSIPATION FOR SERIES PARALLEL RESISTIVE CIRCUITS.				5	4	4	2	0	11			
A 47 A3-24 DO YOU CALCULATE TOTAL RESISTANCE FOR PARALLEL RESISTIVE CIRCUITS.				9	6	7	9	7	14			
A 48 A3-25 DO YOU CALCULATE TOTAL CURRENT FOR PARALLEL RESISTIVE CIRCUITS.				5	6	6	9	7	14			
A 49 A3-26 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROPS FOR PARALLEL RESISTIVE CIRCUITS.				5	9	8	9	7	14			
A 50 A3-27 DO YOU CALCULATE INDIVIDUAL BRANCH CURRENTS FOR PARALLEL RESISTIVE CIRCUITS.				7	5	6	9	7	11			
A 51 A3-28 DO YOU CALCULATE POWER DISSIPATION FOR PARALLEL RESISTIVE CIRCUITS.				5	3	3	2	0	11			
B 52 A1-01 DO YOU MEASURE RESISTANCE.	80	83	81	66	71	51						
B 53 B1-02 DO YOU REPAIR OHMMETERS.		2	4	3	7	4	0					
B 54 B1-03 DO YOU MEASURE VOLTAGE.			75	85	80	75	60					
B 55 A1-04 DO YOU REPAIR VOLTMETERS.				2	2	5	0	0				
B 56 A1-05 DO YOU REPAIR AMMETERS.				2	2	5	0	0				
B 57 B1-06 DO YOU MEASURE CURRENT.				46	52	48	36	57	31			
B 58 B1-07 DO YOU USE MULTIMETERS.				80	83	73	79	60				
B 59 B1-08 DO YOU DIRECTLY USE A QUANTITY OF CHARGE CALLED A COULOMB.				0	1	2	0	0				
B 60 B1-09 DO YOU READ SCHEMATIC.	56	51	51	59	64	54						

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

		SPL 005	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
B	61 B2-01 DO YOU USE OR REFER TO THE TERM EFFECTIVE VOLTAGE (RMS)?	25	38	33	41	50	49
B	62 B2-02 DO YOU USE OR REFER TO THE TERM PEAK TO PEAK VOLTAGE?	34	48	42	43	46	51
B	63 B2-03 DO YOU USE OR REFER TO THE TERM AVERAGE VOLTAGE (DC)?	36	39	37	48	43	40
B	64 B2-04 DO YOU USE OR REFER TO THE TERM WAVE LENGTH?	23	37	32	32	29	31
B	65 B2-05 DO YOU USE OR REFER TO THE TERM FREQUENCY?	48	72	63	64	66	66
B	66 B2-06 DO YOU USE OR REFER TO THE TERM INSTANTANEOUS VALUE?	5	9	8	11	4	29
B	67 B2-07 DO YOU WORK WITH INDUCTORS OR CIRCUITS CONTAINING INDUCTORS, CHOKES, OR CHOKE COILS IN YOUR PRESENT JOB?	9	10	9	14	14	14
B	68 B2-08 DO YOU INSPECT INDUCTORS?	2	6	5	11	4	14
B	69 B2-09 DO YOU CLEAN INDUCTORS?	0	5	3	9	0	3
B	70 B2-10 DO YOU ADJUST INDUCTORS?	0	5	3	7	0	14
B	71 B2-11 DO YOU REMOVE OR REPLACE INDUCTORS?	0	5	4	7	4	9
B	72 B2-12 DO YOU USE OR REFER TO INDUCTANCE?	0	2	1	0	4	14
B	73 B2-13 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE CROSS SECTION OF A COIL?	0	1	0	4	3	3
B	74 B2-14 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS INVERSELY PROPORTIONAL TO ITS INDUCTANCE IS PROPORTIONAL TO THE SQUARE OF THE NUMBER OF COILS?	0	2	1	0	4	0
B	75 B2-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO ITS INDUCTANCE?	0	0	0	0	0	0
B	76 B2-16 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS INVERSELY PROPORTIONAL TO ITS INDUCTANCE?	0	0	0	0	0	0
B	77 B2-17 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE INDUCTANCE OF A COIL IS INVERSELY PROPORTIONAL TO ITS INDUCTANCE?	0	0	0	0	0	0
B	78 B2-18 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE INDUCTANCE OF A COIL IS INVERSELY PROPORTIONAL TO ITS INDUCTANCE?	0	0	0	0	0	0
B	79 B2-19 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE INDUCTANCE OF A COIL IS INVERSELY PROPORTIONAL TO ITS INDUCTANCE?	0	0	0	0	0	0
B	80 B2-20 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT LAGS VOLTAGE IN AC INDUCTOR CIRCUITS?	0	0	0	2	0	6
B	81 B2-21 DO YOU CALCULATE INDUCTIVE REACTANCE?	2	1	1	0	0	3
B	82 B2-22 DO YOU USE OR REFER TO THE GENERAL RULE THAT INDUCTIVE REACTANCE IS DIRECTLY PROPORTIONAL TO FREQUENCY?	0	0	0	0	4	6
B	83 B2-23 DO YOU WORK WITH POWER INDUCTORS?	2	4	3	0	7	6
B	84 B2-24 DO YOU WORK WITH AUDIO FREQUENCY INDUCTORS?	4	2	2	0	7	9
B	85 B2-25 DO YOU WORK WITH RADIO FREQUENCY INDUCTORS?	4	2	2	4	4	4

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TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

PERF TSK	SPL 008	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
C 92 CIRCUIT DO YOU WORK WITH CAPACITORS OR CIRCUITS CONTAINING CAPACITORS IN YOUR PRESENT JOB.	27	19	21	27	18	29
C 93 CI-02 DO YOU INSPECT CAPACITORS.	9	9	9	14	11	29
C 94 CI-03 DO YOU CLEAN CAPACITORS.	5	3	3	9	7	11
C 95 CI-04 DO YOU ADJUST CAPACITORS.	5	4	2	0	1	
C 96 CI-05 DO YOU TEST CAPACITORS.	2	4	3	7	4	11
C 97 CI-06 DO YOU DISCHARGE CAPACITORS.	16	7	10	11	11	17
C 98 CI-07 DO YOU REMOVE OR REPLACE CAPACITORS.	5	6	6	7	4	23
C 99 CI-08 DO YOU USE OR REFER TO DISTRIBUTED CAPACITANCE.	0	1	1	0	0	0
C 100 CI-09 DO YOU USE OR REFER TO ORBITAL STRESS OF ELECTRONS IN A DIELECTRIC.	0	1	0	0	0	
C 101 CI-10 DO YOU USE OR REFER TO FARADS, MICROFARADS, OR PICOFARADS?	9	5	6	11	11	23
C 102 CI-11 DO YOU USE OR REFER TO CAPACITANCE?	14	5	8	14	11	23
C 103 CI-12 DO YOU USE OR REFER TO DIELECTRIC CONSTANT	0	0	0	0	0	0
C 104 CI-13 DO YOU USE OR REFER TO WORKING VOLTAGE RATING OF CAPACITORS	4	5	4	7	4	17
C 105 CI-14 DO YOU USE OR REFER TO CAPACITIVE REACTANCE	4	0	1	0	4	9
C 106 CI-15 DO YOU USE OR REFER TO CAPACITOR COLOR CODES	2	2	2	0	0	14
C 107 CI-16 DO YOU WORK WITH CAPACITORS IN DC CIRCUITS	20	13	15	23	14	31
C 108 CI-17 DO YOU WORK WITH CAPACITORS IN AC CIRCUITS	21	14	16	20	18	29
C 109 CI-18 DO YOU WORK WITH CAPACITORS IN CIRCUITS WITH BOTH DC AND AC	14	13	13	11	11	24
C 110 CI-19 DO YOU WORK WITH CAPACITORS IN DON'T REMEMBER WHICH CIRCUITS	9	7	8	7	11	6
C 111 CI-20 DO YOU CALCULATE CAPACITANCE FOR PARTICULAR CAPACITORS USING FORMULAS	0	0	0	0	0	0
C 112 CI-21 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITANCE OF A CAPACITOR IS DIRECTLY PROPORTIONAL TO THE	0	0	0	0	0	0
C 113 CI-22 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITANCE OF A CAPACITOR IS INVERSELY PROPORTIONAL TO	0	0	0	0	0	0
C 114 CI-23 DO YOU CALCULATE THE TOTAL CAPACITANCE OF CAPACITORS IN SERIES	0	0	0	0	0	9
C 115 CI-24 DO YOU CALCULATE THE TOTAL CAPACITANCE OF CAPACITORS IN PARALLEL	0	0	0	0	0	9
C 116 CI-25 DO YOU CALCULATE THE TOTAL CAPACITANCE OF CAPACITORS IN SERIES-PARALLEL CIRCUITS	0	0	0	0	0	6
C 117 CI-26 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT DUES NOT FLOW THROUGH CAPACITORS; IT ONLY APPEARS TO DO SO	0	1	1	2	0	9
C 118 CI-27 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT LEADS VOLTAGE IN AC CAPACITOR CIRCUITS	0	0	0	2	0	9
C 119 CI-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT CAPACITIVE REACTANCE IS INVERSELY PROPORTIONAL TO	0	0	0	2	4	0
C 120 CI-29 DO YOU CALCULATE CAPACITIVE REACTANCE	0	0	0	0	4	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

Q4-TASK

	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
C 121 C-30 DO YOU WORK WITH ROTOR-STATOR (VARIABLE) CAPACITORS	7	4	5	9	7	11
C 122 C-31 DO YOU WORK WITH COMPRESSION (TRIMMER) CAPACITORS	4	3	3	2	4	9
C 123 C-32 DO YOU WORK WITH ELECTROLYTIC (FIXED) CAPACITORS	7	7	7	9	11	26
C 124 C-33 DO YOU WORK WITH PAPER (FIXED) CAPACITORS	9	6	7	7	11	23
C 125 C-34 DO YOU WORK WITH MICA (FIXED) CAPACITORS	7	7	7	9	11	26
C 126 C-35 DO YOU WORK WITH CERAMIC (FIXED) CAPACITORS	7	6	6	9	11	29
C 127 C-36 DO YOU WORK WITH DON'T REMEMBER WHICH TYPE OF CAPACITORS	11	11	10	14	7	3
C 128 C-37 DO YOU WORK WITH TRANSFORMERS IN YOUR PRESENT JOB	18	15	16	16	29	34
C 129 C-38 DO YOU INSPECT TRANSFORMERS	7	8	8	14	21	29
C 130 C-39 DO YOU CLEAN TRANSFORMERS	2	5	4	7	4	11
C 131 C-40 DO YOU ADJUST TRANSFORMERS	5	5	5	5	4	9
C 132 C-41 DO YOU TROUBLESHOOT TRANSFORMERS	4	6	5	16	14	23
C 133 C-42 DO YOU REMOVE OR REPLACE COMPLETE TRANSFORMERS	7	8	8	14	7	31
C 134 C-43 DO YOU REMOVE OR REPLACE TRANSFORMER PARTS, SUCH AS THE PRIMARY WINDING	0	1	1	0	0	0
C 135 C-44 DO YOU MAKE A DISTINCTION BETWEEN MUTUAL INDUCTION AND MUTUAL INDUCTANCE (M)	0	1	1	0	0	0
C 136 C-45 DO YOU USE THE SYMBOL FOR MUTUAL INDUCTANCE, M	0	0	0	0	0	3
C 137 C-46 DO YOU REFER TO OR USE THE COEFFICIENT OF COUPLING WHEN WORKING WITH TRANSFORMERS	0	0	0	0	4	0
C 138 C-47 DO YOU CALCULATE TURNS RATIOS FOR TRANSFORMERS USING CURRENT OR VOLTAGE RATIOS	0	1	1	0	0	3
C 139 C-48 DO YOU REFER TO REFLECTED IMPEDANCE WHEN WORKING WITH TRANSFORMERS	0	0	0	0	0	0
C 140 C-49 DO YOU CALCULATE IMPEDANCE INTERACTIONS FOR TRANSFORMERS	0	0	0	0	0	0
C 141 C-50 DO YOU WORK WITH AUTOTRANSFORMERS	4	0	1	2	4	6
C 142 C-51 DO YOU WORK WITH POWER TRANSFORMERS	11	13	12	14	14	34
C 143 C-52 DO YOU WORK WITH AUDIO TRANSFORMERS	2	1	1	2	4	14
C 144 C-53 DO YOU WORK WITH RADIO FREQUENCY TRANSFORMERS	4	3	3	2	0	11
C 145 C-54 DO YOU WORK WITH DON'T REMEMBER WHAT TYPE OF TRANSFORMERS	5	5	5	5	7	3
C 146 C-55 DO YOU CHECK TRANSFORMERS FOR OPEN WINDINGS BY MEASURING RESISTANCE	2	5	4	14	11	26
C 147 C-56 DO YOU CHECK TRANSFORMERS FOR SHORTED WINDINGS BY MEASURING RESISTANCE	2	5	4	14	7	23
C 148 C-57 DO YOU CHECK TRANSFORMERS FOR SHORTED WINDINGS BY MEASURING OUTPUT VOLTAGES	0	4	2	14	11	23
C 149 C-58 DO YOU MEASURE RESISTANCE OF TRANSFORMER WINDINGS TO DETERMINE WHETHER A TRANSFORMER HAS A STEP-UP OR	2	1	1	2	4	3
C 150 C-59 DO YOU MEASURE OUTPUT VOLTAGES OF TRANSFORMERS TO DETERMINE WHETHER A TRANSFORMER HAS A STEP-UP OR STEP-DOWN	2	3	2	2	4	6
C 151 C-60 DO YOU REFER TO BASIC TRANSFORMER SCHEMATIC SYMBOLS FOR TRANSFORMERS	11	9	9	16	19	31

TASK GROUP SUMMARY
INCENTIVE MEMBERS PERFORMING

DUTY TASK	SPL					
	00A	007	008	009	010	011
C 152 C2-25 DO YOU REFER TO MULTIPLE SECONDARY-WINDINGS SCHEMATIC SYMBOLS FOR TRANSFORMERS	5	5	5	9	11	29
C 153 C2-26 DO YOU REFER TO MULTIPLE TAP SCHEMATIC SYMBOLS FOR TRANSFORMERS	5	5	5	11	18	26
C 154 C2-27 DO YOU REFER TO CENTER TAP SCHEMATIC SYMBOLS FOR TRANSFORMERS	7	6	6	11	18	34
C 155 C2-28 DO YOU REFER TO AIR CORE SCHEMATIC SYMBOLS FOR TRANSFORMERS	4	5	4	7	7	20
C 156 C2-29 DO YOU REFER TO IRON CORE SCHEMATIC SYMBOLS FOR TRANSFORMERS	5	4	4	9	7	26
C 157 C2-30 DO YOU REFER TO COMBINATIONS OF THE ABOVE SCHEMATIC SYMBOLS FOR TRANSFORMERS	4	3	3	9	11	24
C 158 C2-31 DO YOU DETERMINE PHASE RELATIONSHIPS BETWEEN SECONDARY AND PRIMARY VOLTAGES OF TRANSFORMERS USING	0	3	2	0	7	6
C 159 C2-32 DO YOU DETERMINE OR REFER TO THE TYPE OF CORE IN TRANSFORMERS YOU WORK WITH	0	1	1	2	4	9
C 160 C2-33 DO YOU REFER TO OR USE THE GENERAL RULE THAT THE TURNS RATIO OF A TRANSFORMER IS EQUAL TO THE VOLTAGE RATIO	0	1	1	2	7	3
C 161 C2-34 DO YOU USE OR REFER TO STEP-UP OR STEP-DOWN RATIOS FOR TRANSFORMERS	0	3	2	5	11	14
C 162 C2-35 DO YOU CALCULATE VOLTAGE RATIOS FOR TRANSFORMERS USING TURNS RATIOS	0	0	0	2	4	3
C 163 C2-36 DO YOU CALCULATE CURRENT RATIOS FOR TRANSFORMERS USING TURNS RATIOS	0	0	0	2	4	3
C 164 C2-37 DOES YOUR JOB INVOLVE ANY TASKS DEALING WITH THREE PHASE TRANSFORMERS	9	5	6	5	11	14
C 165 C2-38 DO YOU INSPECT THREE PHASE TRANSFORMERS	4	5	4	5	14	14
C 166 C2-39 DO YOU CLEAN OR LUBRICATE THREE PHASE TRANSFORMERS	2	1	1	0	4	3
C 167 C2-40 DO YOU ADJUST THREE PHASE TRANSFORMERS	2	4	3	0	11	6
C 168 C2-41 DO YOU TROUBLESHOOT THREE PHASE TRANSFORMERS	0	2	1	2	7	9
C 169 C2-42 DO YOU REMOVE OR REPLACE COMPLETE THREE PHASE TRANSFORMERS	0	4	2	2	7	6
C 170 C2-43 DO YOU REMOVE OR REPLACE THREE PHASE TRANSFORMER PARTS SUCH AS WINDINGS	0	0	0	0	4	0
C 171 C3-01 DO YOU USE OR REFER TO PERMANENT MAGNETS	5	6	6	7	18	14
C 172 C3-02 DO YOU USE OR REFER TO TEMPORARY MAGNETS	4	5	4	2	7	14
C 173 C3-03 DO YOU USE OR REFER TO RETENTIVITY OF MAGNETIC MATERIALS	0	1	1	0	0	6
C 174 C3-04 DO YOU USE OR REFER TO RELUCTANCE OF MAGNETIC MATERIALS	0	1	1	0	0	6
C 175 C3-05 DO YOU USE OR REFER TO PERMEABILITY OF MAGNETIC MATERIALS	0	1	1	2	0	3
C 176 C3-06 DO YOU USE OR REFER TO RESIDUAL MAGNETISM	2	1	1	0	0	6
C 177 C3-07 DO YOU USE OR REFER TO MAGNETIC LINES OF FORCE OR FLUX	2	3	2	11	7	9
C 178 C3-08 DO YOU USE OR REFER TO WEIERSTRASS' THEORY OF MAGNETISM	0	0	0	0	0	0

PERCENT MEMBERS PERFORMING

ITEM	SPL 004	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
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C 179 CJ-09 DO YOU USE OR REFER TO DOMAIN THEORY OF MAGNETISM
 C 180 CJ-10 DO YOU USE OR REFER TO MAGNETIC INDUCTION
 C 181 CJ-11 DO YOU USE OR REFER TO FLUX DENSITY
 C 182 CJ-12 DO YOU USE OR REFER TO THE GENERAL RULE THAT FOR MAGNETIC POLES, LIKE POLES REPEL AND UNLIKE POLES ATTRACT
 C 183 CJ-13 DO YOU USE THE LEFT HAND THUMB RULE TO FIND THE DIRECTION OF MAGNETIC FIELDS ABOUT STRAIGHT WIRES
 C 184 CJ-14 DO YOU USE THE LEFT HAND THUMB RULE TO FIND THE NORTH POLE OF A CURRENT CARRYING COIL
 D 185 DJ-01 DO YOU WORK WITH RC, LR, RCL CIRCUITS IN YOUR PRESENT JOB
 D 186 DJ-02 DO YOU USE OR REFER TO VECTORS WHEN WORKING WITH RCL CIRCUITS
 D 187 JI-03 DO YOU USE OR REFER TO PYTHAGOREAN THEOREM WHEN WORKING WITH RCL CIRCUITS
 D 188 DJ-04 DO YOU USE OR REFER TO SINE WHEN WORKING WITH RCL CIRCUITS
 D 189 DJ-05 DO YOU USE OR REFER TO COSINE WHEN WORKING WITH RCL CIRCUITS
 D 190 DJ-06 DO YOU USE OR REFER TO TANGENT WHEN WORKING WITH RCL CIRCUITS
 D 191 DJ-07 DO YOU USE OR REFER TO WATTS WHEN WORKING WITH RCL CIRCUITS
 D 192 DJ-08 DO YOU USE OR REFER TO TRUE POWER (PT) WHEN WORKING WITH RCL CIRCUITS
 D 193 DJ-09 DO YOU USE OR REFER TO MAXIMUM POWER (PM) WHEN WORKING WITH RCL CIRCUITS
 D 194 DJ-10 DO YOU USE OR REFER TO AVERAGE POWER (PAVE) WHEN WORKING WITH RCL CIRCUITS
 D 195 DJ-11 DO YOU USE OR REFER TO APPARENT POWER (PA) WHEN WORKING WITH RCL CIRCUITS
 D 196 DJ-12 DO YOU USE OR REFER TO POWER FACTOR (PF) WHEN WORKING WITH RCL CIRCUITS
 D 197 DJ-13 DO YOU USE OR REFER TO RESONANT CIRCUITS WHEN WORKING WITH RCL CIRCUITS
 D 198 DJ-14 DO YOU USE OR REFER TO BANDWIDTH WHEN WORKING WITH RCL CIRCUITS
 D 199 DJ-15 DO YOU USE OR REFER TO SELECTIVITY WHEN WORKING WITH RCL CIRCUITS
 D 200 DJ-16 DO YOU USE OR REFER TO RESONANT FREQUENCY WHEN WORKING WITH RCL CIRCUITS
 D 201 DJ-17 DO YOU USE OR REFER TO HALF POWER POINTS WHEN WORKING WITH RCL CIRCUITS
 D 202 DJ-18 DO YOU USE OR REFER TO BANDPASS REGION WHEN WORKING WITH RCL CIRCUITS
 D 203 DJ-19 DO YOU USE OR REFER TO CIRCUIT Q WHEN WORKING WITH RCL CIRCUITS

DUTY TASK	SPL					
	006	007	008	009	010	011
D 204 D1-20 DO YOU USE OR REFER TO TANK CIRCUITS WHEN WORKING WITH RCL CIRCUITS	2	2	2	0	7	6
D 205 D1-21 DO YOU DETERMINE VALUES OF TRIGONOMETRIC FUNCTIONS USING FORMULAS	0	0	0	0	0	0
D 206 D1-22 DO YOU DRAW VOLTAGE, CURRENT, OR IMPEDANCE VECTOR DIAGRAMS FOR CIRCUITS	0	1	1	0	0	0
D 207 D1-23 DO YOU CALCULATE TOTAL IMPEDANCE FOR CAPACITIVE CIRCUITS	0	2	1	0	0	3
D 208 D1-24 DO YOU CALCULATE PHASE ANGLES BETWEEN IMPEDANCE AND RESISTANCE IN CAPACITIVE CIRCUITS	0	0	0	0	0	0
D 209 D1-25 DO YOU CALCULATE TOTAL IMPEDANCE FOR SERIES RCL CIRCUITS	0	2	1	0	0	3
D 210 D1-26 DO YOU CALCULATE IMPEDANCE ANGLES FOR SERIES RCL CIRCUITS	0	1	1	0	0	0
D 211 D1-27 DO YOU CALCULATE APPARENT POWER (PA) FOR SERIES RCL CIRCUITS	0	2	1	0	0	3
D 212 D1-28 DO YOU CALCULATE TRUE POWER (PT) FOR SERIES RCL CIRCUITS	0	1	1	0	0	3
D 213 D1-29 DO YOU CALCULATE POWER FACTORS (PF) FOR SERIES RCL CIRCUITS	0	1	1	0	0	0
D 214 D1-30 DO YOU CALCULATE TOTAL CURRENT FOR PARALLEL RCL CIRCUITS	0	1	1	0	0	4
D 215 D1-31 DO YOU CALCULATE TOTAL IMPEDANCE ANGLES FOR PARALLEL RCL CIRCUITS	0	0	0	0	0	0
D 216 D1-32 DO YOU CALCULATE TOTAL IMPEDANCE FOR PARALLEL RCL CIRCUITS USING THE ASSUMED VOLTAGE METHOD	0	0	0	0	0	0
D 217 D1-33 DO YOU CALCULATE TOTAL IMPEDANCE FOR PARALLEL RCL CIRCUITS USING OHM'S LAW	0	2	1	0	0	6
D 218 D1-34 DO YOU CHECK CAPACITORS USING OMMETERS	0	3	2	2	4	3
D 219 D1-35 DO YOU CHECK CAPACITORS USING SUBSTITUTION	0	2	1	5	0	9
D 220 D1-36 DO YOU CHECK INDUCTORS USING OMMETERS	0	3	2	0	0	3
D 221 D1-37 DO YOU CHECK INDUCTORS USING SUBSTITUTION	0	1	1	2	0	6
D 222 D1-38 DO YOU USE OR REFER TO THE GENERAL RULE THAT $\Theta = 0$, $PF = 1$, AND $PA = PT$ FOR RESONANT CIRCUITS	0	0	0	0	0	0
D 223 D1-39 DO YOU CALCULATE RESONANT FREQUENCIES FOR RCL CIRCUITS	0	1	1	0	0	0
D 224 D1-40 DO YOU USE OR REFER TO THE GENERAL RULE THAT IMPEDANCE IS MINIMUM AND CURRENT MAXIMUM AT THE RESONANT	0	2	1	0	4	3
D 225 D1-41 DO YOU USE OR REFER TO THE GENERAL RULE THAT LINE CURRENT IS MINIMUM AND IMPEDANCE MAXIMUM AT RESONANT	0	2	1	0	4	0
D 226 D1-42 DO YOU USE OR REFER TO THE GENERAL RULE THAT HALF POWER POINTS ARE AT 70.7 PERCENT OF THE PEAK CURRENT VALUE	0	1	1	0	4	3
D 227 D1-43 DO YOU USE OR REFER TO THE GENERAL RULE THAT BANDWIDTH IS INVERSELY PROPORTIONAL TO Q	0	1	1	0	4	0
D 228 D1-44 DO YOU DETERMINE HOW CHANGES IN FREQUENCY, RESISTANCE, CAPACITANCE, OR INDUCTANCE WILL AFFECT CURRENT OR PHASE	0	0	0	0	0	0

TASK GROUP SUMMARY
PRESENT MEMBERS PERFORMING

DRAFT	SPL				
	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010
D 429 D2-01 IN YOUR PRESENT JOB, DO YOU WORK WITH, USE, OR REFER TO SERIES OR PARALLEL RESONANT CIRCUITS OR TIME CONSTANTS	2	2	2	2	7 9
D 430 D2-02 DO YOU WORK WITH, USE, OR REFER TO TIME CONSTANTS	2	1	1	0	7 11
D 431 D2-03 DO YOU WORK WITH, USE, OR REFER TO AVAILABLE VOLTAGE	2	1	1	0	6
D 432 D3-04 DO YOU WORK WITH, USE, OR REFER TO TRANSIENT INTERVALS	0	1	0	0	3
D 433 D2-05 DO YOU USE OR REFER TO THE GENERAL RULE THAT A CAPACITOR IS FULLY CHARGED (OR DISCHARGED) AFTER FIVE (5) TIME CONSTANTS	0	0	0	0	4 3
D 434 D2-06 DO YOU USE OR REFER TO UNIVERSAL TIME CONSTANT CHARTS	0	0	0	0	3
D 435 D2-07 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE CIRCUIT CURRENT OR COMPONENT VOLTTAGES AFTER A SPECIFIC TIME REQUIRED FOR CIRCUIT CURRENT OR COMPONENT VOLTTAGES TO	0	0	0	0	3
D 436 D2-08 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE THE TIME REQUIRED FOR CIRCUIT CURRENT OR COMPONENT VOLTTAGES TO	0	0	0	0	3
D 437 D2-09 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE COMPONENT VALUES REQUIRED FOR CIRCUIT CURRENT AND	0	0	0	0	3
D 438 D2-10 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT IN LR CIRCUITS REACHES ITS MINIMUM VALUE (OR ZERO) AFTER	0	0	0	0	9
D 439 D3-01 DO YOU WORK WITH CIRCUITS USED AS FILTERS IN YOUR PRESENT JOB	4	3	3	5	11 9
D 440 D3-02 DO YOU INSPECT FILTER CIRCUITS	2	3	2	5	7 6
D 441 D3-03 DO YOU ALIGN OR ADJUST FILTER CIRCUITS	2	2	2	5	4 3
D 442 D3-04 DO YOU TROUBLESHOOT TO THE FILTER CIRCUIT LEVEL	0	2	1	2	4 6
D 443 D3-05 DO YOU TROUBLESHOOT TO COMPONENT PARTS	0	3	2	2	9
D 444 D3-06 DO YOU TROUBLESHOOT TO COMPONENT PARTS	0	3	2	4	6
D 445 D3-07 DO YOU REMOVE OR REPLACE THE COMPLETE FILTER CIRCUIT	0	3	2	7	9
D 446 D3-08 DO YOU REMOVE OR REPLACE FILTER CIRCUIT COMPONENT PARTS	0	3	2	4	6
D 447 D3-09 DO YOU WORK WITH LOW PASS FILTERS	0	1	1	0	6
D 448 D3-10 DO YOU WORK WITH HIGH PASS FILTERS	0	1	1	0	6
D 449 D3-11 DO YOU WORK WITH BANDPASS FILTERS	0	1	1	0	6
D 450 D3-12 DO YOU WORK WITH BAND-REJECT FILTERS	0	1	1	0	6
D 451 D3-13 DON'T REMEMBER WHICH TYPE OF FILTER YOU WORK WITH	4	2	2	7	6
D 452 D3-14 DO YOU WORK WITH L-SECTION FILTER CONFIGURATION	0	1	0	4	3
D 453 D3-15 DO YOU WORK WITH T-SECTION FILTER CONFIGURATION	0	1	1	2	0
D 454 D3-16 DO YOU WORK WITH PI-SECTION FILTER CONFIGURATION	0	1	1	2	3
D 455 D3-17 DON'T REMEMBER WHICH TYPE FILTER CONFIGURATION	2	2	2	7	9
D 456 D3-18 DO THE FILTERS YOU WORK WITH USE PARALLEL RESONANT CIRCUITS	0	2	1	2	6
D 457 D3-19 DO THE FILTERS YOU WORK WITH USE SERIES-PARALLEL CIRCUITS	0	2	1	2	6
D 458 D3-20 DO THE FILTERS YOU WORK WITH USE SERIES RESONANT CIRCUITS	0	2	1	0	6

		DY-TSA	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
E 259	E3-21	DON'T REMEMBER WHICH TYPE OF BASIC CIRCUIT	2	1	0	7	4	
E 260	E3-22	DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE CAPACITANCE OR INDUCTANCE VALUES REQUIRED FOR SPECIFIC	0	0	0	0	0	
E 261	E1-01	DO YOU WORK WITH COUPLING DEVICES IN YOUR PRESENT JOB	0	3	2	2	11	9
E 262	E1-02	DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH RC	0	3	2	5	7	9
E 263	E1-03	DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH RC	0	2	1	5	0	9
E 264	E1-04	DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH RC	0	2	1	2	11	9
E 265	E1-05	DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM RC COUPLING	0	3	2	2	4	4
E 266	E1-06	DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM IMPEDANCE COUPLING	0	2	1	2	4	4
E 267	E1-07	DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM TRANSFORMER COUPLING	0	2	1	0	7	3
E 268	E1-08	DO YOU WORK WITH DIRECTLY COUPLED CIRCUITS	0	1	1	0	4	9
E 269	E1-09	DO YOU WORK WITH CAPACITIVE-RESISTIVE COUPLED CIRCUITS	0	1	1	0	4	9
E 270	E1-10	DO YOU WORK WITH CAPACITIVE-INDUCTIVE COUPLED CIRCUITS	0	1	1	0	4	9
E 271	E1-11	DO YOU WORK WITH TRANSFORMER COUPLED CIRCUITS	0	1	1	0	7	9
E 272	E1-12	DON'T REMEMBER WHICH TYPE OF COUPLING CIRCUITS	0	2	1	2	4	11
E 273	E2-01	IN YOUR PRESENT JOB, DO YOU PERFORM SOLDERED CONNECTIONS	29	35	31	41	39	46
E 274	E2-02	DO YOU SELECT TYPE OF SOLDER TO USE	27	26	30	25	31	
E 275	E2-03	DO YOU ADD FLUX TO CONNECTIONS	25	25	24	32	25	26
E 276	E2-04	DO YOU CLEAN CONNECTIONS USING SOLVENTS	21	29	26	27	25	26
E 277	E2-05	DO YOU STRIP INSULATION FROM WIRES	27	34	30	39	32	34
E 278	E2-06	DO YOU CONNECT OR DISCONNECT HEAT SINKS	18	20	19	23	25	31
E 279	E2-07	DO YOU BEND OR SHAPE WIRES OR LEADS	27	31	28	36	32	31
E 280	E2-08	DO YOU CUT WIRES	27	33	30	36	32	31
E 281	E2-09	DO YOU FILE OR SHAPE SOLDERING IRON TIPS	21	26	24	25	29	29
E 282	E2-10	DO YOU TIN SOLDERING IRON TIPS	21	28	25	30	32	34
E 283	E2-11	DO YOU CLEAN SOLDERING IRON TIPS	27	32	29	32	32	34
E 284	E2-12	DO YOU CLEAN ELECTRICAL SURFACES USING ERASERS	18	23	20	25	25	26
E 285	E2-13	DO YOU TIN OR PRE-TIN CONDUCTORS	20	19	19	23	32	34
E 286	E2-14	DO YOU INSPECT SOLDERED CONNECTIONS	21	30	26	34	39	43
E 287	E2-15	DO YOU DESOLDER CONNECTIONS BY WICKING	14	15	14	18	18	20
E 288	E2-16	DO YOU DESOLDER CONNECTIONS USING VACUUM DESOLDERING TOOLS	11	0	3	9	4	11
E 289	E2-17	DO YOU CUT COMPONENT LEADS TO REMOVE COMPONENTS	20	14	15	20	11	34
E 290	E2-18	DO YOU CRUSH COMPONENTS FOR REMOVAL	9	3	5	2	0	3

TASK GROUP SUMMARY
PRESENT METHODS PERFORMANCE

DR-TSK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
E 291 E2-19 DO YOU MAKE HARDWARE CONNECTIONS	18	25	22	27	32	34
E 292 E2-20 DO YOU MAKE PRINTED CIRCUIT BOARD CONNECTIONS	1A	8	11	16	11	20
E 293 E2-21 DO YOU SOLDER PASSIVE COMPONENTS SUCH AS RESISTORS ON	9	7	8	11	14	11
CAPACITORS ON PRINTED CIRCUIT BOARDS						
E 294 E2-22 DO YOU SOLDER ACTIVE COMPONENTS SUCH AS SOLID-STATE	7	5	6	9	11	11
DIODES OR TRANSISTORS ON PRINTED CIRCUIT BOARDS						
E 295 E3-01 DO YOU WORK WITH RELAYS ON YOUR PRESENT JOB	7	16	13	23	25	23
E 296 E3-02 DO YOU ADJUST RELAYS	4	7	6	7	0	6
E 297 E3-03 DO YOU CLEAN RELAYS	0	7	5	7	4	6
E 298 E3-04 DO YOU INSPECT RELAYS	2	8	6	11	7	17
E 299 E3-05 DO YOU REMOVE OR REPLACE COMPLETE RELAYS	4	9	7	14	14	17
E 300 E3-06 DO YOU REMOVE OR REPLACE PARTS OR RELAYS	2	1	1	2	0	0
E 301 E3-07 DO YOU TROUBLESHOOT RELAYS	4	4	7	6	16	14
E 302 E3-08 DO YOU STRAIGHTEN RELAY CONTACTS	0	0	6	4	9	0
E 303 E3-09 DO YOU PERFORM TASKS ON RELAY CONTACTS	2	6	5	5	4	6
E 304 E3-10 DO YOU PERFORM TASKS ON RELAY CORES	0	0	0	0	0	0
E 305 E3-11 DO YOU PERFORM TASKS ON RELAY COILS	0	0	0	0	0	0
E 306 E3-12 DO YOU PERFORM TASKS ON RELAY ARMATURES	0	0	0	0	0	0
E 307 E3-13 DO YOU PERFORM TASKS ON RELAY SPRINGS	2	3	2	5	0	3
E 308 E3-14 DO YOU USE OR REFER TO SINGLE POLE, SINGLE THROW (SPST), NORMALLY OPEN (NO) SCHEMATIC SYMBOLS FOR RELAYS	5	9	8	16	14	23
E 309 E3-15 DO YOU USE OR REFER TO SINGLE POLE, SINGLE THROW (SPST), NORMALLY CLOSED (NC) SCHEMATIC SYMBOLS FOR RELAYS	4	8	6	16	18	23
E 310 E3-16 DO YOU USE OR REFER TO SINGLE POLE, DOUBLE THROW (SPDT) SCHEMATIC SYMBOLS FOR RELAYS	2	7	5	16	18	20
E 311 E3-17 DO YOU USE OR REFER TO DOUBLE POLE, DOUBLE THROW (DPDT) SCHEMATIC SYMBOLS FOR RELAYS	2	8	6	16	18	20
E 312 E3-18 DO YOU USE OR REFER TO OTHER RELAY SYMBOLS SCHEMATIC SYMBOLS FOR RELAYS	2	7	5	11	18	14
E 313 E3-19 DO YOU CHECK ELECTRICAL CONTINUITY OF COILS BY MEASURING RESISTANCE	2	3	2	16	11	6
E 314 F1-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH MICROPHONES	0	2	1	2	0	6
F 315 F1-02 DO YOU INSPECT MICROPHONES	0	0	0	0	0	3
F 316 F1-03 DO YOU CLEAN MICROPHONES	0	0	0	2	0	0
F 317 F1-04 DO YOU OPERATE MICROPHONES	0	2	1	2	0	6
F 318 F1-05 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS BUT DO NOT TROUBLESHOOT DOWN TO COMPONENT	0	0	0	2	0	3
F 319 F1-06 DO YOU TROUBLESHOOT DOWN TO MICROPHONE PARTS	0	0	0	0	0	0
F 320 F1-07 DO YOU REMOVE OR REPLACE COMPLETE MICROPHONES	0	0	0	2	0	3
F 321 F1-08 DO YOU REMOVE OR REPLACE MICROPHONE PARTS	0	0	0	0	0	0
F 322 F1-09 DO YOU PERFORM TASKS ON CARBON MICROPHONES	0	0	0	2	0	6
F 323 F1-10 DO YOU PERFORM TASKS ON CAPACITOR MICROPHONES	0	0	0	2	0	0
F 324 F1-11 DO YOU PERFORM TASKS ON CRYSTAL MICROPHONES	0	0	0	2	0	3
F 325 F1-12 DO YOU PERFORM TASKS ON DYNAMIC MICROPHONES	0	0	2	0	3	
F 326 F1-13 DO YOU PERFORM TASKS ON VELOCITY RIBBON MICROPHONES	0	1	1	0	0	0

DY-15k

		SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
F 327	F2-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH SPEAKERS	0	0	0	2	0	4
F 328	F2-02 DO YOU INSPECT SPEAKERS	0	0	0	0	0	6
F 329	F2-03 DO YOU CLEAN SPEAKERS	0	0	0	0	0	0
F 330	F2-04 DO YOU OPERATE SPEAKERS	0	0	0	0	0	4
F 331	F2-05 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS BUT DO NOT TROUBLESHOOT DOWN TO COMPONENT	0	0	0	0	0	3
F 332	F2-06 DO YOU TROUBLESHOOT DOWN TO SPEAKER PARTS	0	0	0	0	0	0
F 333	F2-07 DO YOU REMOVE OR REPLACE COMPLETE SPEAKERS	0	0	0	0	0	4
F 334	F2-08 DO YOU REMOVE OR REPLACE SPEAKER PARTS	0	0	0	0	0	0
F 335	F2-09 DO YOU PERFORM ANY TASKS ON SPEAKER CONES	0	0	0	0	0	0
F 336	F2-10 DO YOU PERFORM ANY TASKS ON SPEAKER SPIDERS	0	0	0	0	0	0
F 337	F2-11 DO YOU PERFORM ANY TASKS ON SPEAKER FIELD COILS	0	0	0	0	0	0
F 338	F2-12 DO YOU PERFORM ANY TASKS ON SPEAKER VOICE COILS	0	0	0	0	0	0
F 339	F2-13 DO YOU PERFORM ANY TASKS ON SPEAKER PERMANENT MAGNETS	0	0	0	0	0	0
F 340	F2-14 DO YOU PERFORM ANY TASKS ON SPEAKER ELECTROMAGNETS	0	0	0	0	0	0
F 341	F2-15 DO YOU PERFORM ANY TASKS ON SPEAKER SOFT IRON CORES	0	0	0	0	0	0
F 342	F3-01 DO YOU USE OSCILLOSCOPES IN YOUR PRESENT JOB	50	55	52	57	46	43
F 343	F3-02 DO YOU USE OSCILLOSCOPES TO PERFORM OPERATIONAL CHECKS	30	42	37	39	36	40
F 344	F3-03 DO YOU USE OSCILLOSCOPES TO PERFORM ALIGNMENTS OR ADJUSTMENTS	34	45	41	50	39	37
F 345	F3-04 DO YOU USE OSCILLOSCOPES TO TROUBLESHOOT ELECTRONIC CIRCUITS	29	37	33	34	25	37
F 346	F3-05 DO YOU USE OSCILLOSCOPES TO MEASURE FREQUENCY	43	46	44	48	36	34
F 347	F3-06 DO YOU USE OSCILLOSCOPES TO MEASURE TIME	39	42	41	43	43	40
F 348	F3-07 DO YOU USE OSCILLOSCOPES TO OBSERVE LISAJOUS PATTERNS	7	5	5	5	0	3
F 349	F3-08 DO YOU USE OSCILLOSCOPES TO OBSERVE SIGNALS WHILE UTILIZING ATTENUATOR PROBES	29	35	31	25	25	29
F 350	F3-09 DO YOU USE OSCILLOSCOPES TO MAKE FREQUENCY OR TIME MEASUREMENTS USING DELAY TIME MULTIPLIERS	21	22	21	20	18	20
F 351	F3-10 DO YOU USE OSCILLOSCOPES TO MEASURE AC VOLTAGE	43	45	42	48	32	29
F 352	F3-11 DO YOU USE OSCILLOSCOPES TO MEASURE OR OBSERVE SIGNALS AFTER FIRST ADJUSTING THE GAIN AND DC BAL CONTROLS	25	18	20	25	18	29
F 353	F3-12 DO YOU USE OSCILLOSCOPES TO MEASURE DC VOLTAGE	34	39	36	43	25	31
G 354	GI-01 DO YOU WORK WITH SEMICONDUCTOR DIODES IN YOUR PRESENT JOB	5	6	7	9	11	23
G 355	GI-02 DO YOU INSPECT DIODES	4	7	6	9	14	23
G 356	GI-03 DO YOU REMOVE OR REPLACE DIODES	2	5	3	7	11	17
G 357	GI-04 DO YOU CHECK DIODES USING AN INSTRUMENT	2	5	4	7	4	14
G 358	GI-05 DO YOU USE ENERGY LEVEL DIAGRAMS IN YOUR WORK WITH DIODES	0	0	0	0	0	0
G 359	GI-06 DO YOU USE PN JUNCTION DIODE CHARACTERISTIC CURVES, TOGETHER WITH VALUES OF FORWARD AND REVERSE BIAS VOLTAGE, FOR FORWARD OR REVERSE BIAS RESISTANCE FOR DIODES	2	0	1	0	0	0

task group summary
recent members helpful in

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PERFORMERS PERFORMING AFMCS GROUPS
T-SK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

	DYNTSK	SPL 00A	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
6 383	GI-30 DO YOU USE OR REFER TO FORBIDDEN BAND IN SEMICONDUCTOR MATERIALS	0	0	0	0	0	0
6 384	GI-31 DO YOU USE OR REFER TO CONDUCTION BAND IN SEMICONDUCTOR MATERIALS	0	0	0	0	0	0
6 385	GI-32 DO YOU USE OR REFER TO COVALENT BONDING IN SEMICONDUCTOR MATERIALS	0	0	0	0	0	0
6 386	GI-33 DO YOU USE OR REFER TO ELECTRON-HOLE PAIR CREATED IN SEMICONDUCTORS	0	0	0	0	0	3
6 387	GI-34 DO YOU USE OR REFER TO ELECTRON FLOW OR HOLE FLOW IN SEMICONDUCTORS	0	0	0	0	4	6
6 388	GI-35 DO YOU USE OR REFER TO DONOR IMPURITY IN SEMICONDUCTORS	0	0	0	0	0	0
6 389	GI-36 DO YOU USE OR REFER TO ACCEPTOR IMPURITY IN SEMICONDUCTORS	0	0	0	0	0	0
6 390	GI-37 DO YOU USE OR REFER TO P-TYPE SEMICONDUCTOR MATERIAL	0	0	0	0	0	3
6 391	GI-38 DO YOU USE OR REFER TO N-TYPE SEMICONDUCTOR MATERIAL	0	0	0	0	0	3
6 392	GI-39 DO YOU USE OR REFER TO MAJORITY CARRIERS IN SEMICONDUCTORS	0	0	0	0	0	0
6 393	GI-40 DO YOU USE OR REFER TO MINORITY CARRIERS IN SEMICONDUCTORS	0	0	0	0	0	0
6 394	GI-41 DO YOU USE OR REFER TO JUNCTION RECOMBINATION IN SEMICONDUCTORS	0	0	0	0	0	0
6 395	GI-42 DO YOU USE OR REFER TO DEPLETION REGION IN SEMICONDUCTORS	0	0	0	0	0	0
6 396	GI-43 DO YOU USE OR REFER TO RELATIONSHIP BETWEEN BARRIER WIDTH AND DIFFERENCE OF POTENTIAL	0	0	0	0	0	0
6 397	GI-44 DO YOU USE OR REFER TO THE 10:1 BACK TO FRONT RESISTANCE RATIO FOR DIODES	0	3	2	2	4	17
6 398	GI-45 DO YOU USE OR REFER TO BARRIER HEIGHT IN SEMICONDUCTORS	0	0	0	0	0	3
6 399	GI-46 DO YOU USE OR REFER TO DIODE SUBSTITUTION INFORMATION	2	0	1	2	0	6
6 400	GI-47 DO YOU USE OR REFER TO MAXIMUM AVERAGE FORWARD CURRENT DIODE RATINGS	0	1	1	0	0	3
6 401	GI-48 DO YOU USE OR REFER TO PEAK RECURRENT FORWARD CURRENT DIODE RATINGS	0	1	1	0	0	0
6 402	GI-49 DO YOU USE OR REFER TO MAXIMUM SURGE CURRENT DIODE RATINGS	0	1	1	0	0	3
6 403	GI-50 DO YOU USE OR REFER TO PEAK REVERSE (INVERSE) VOLTAGE DIODE RATINGS	0	1	1	0	0	3
6 404	GI-51 DO YOU WORK WITH TRANSISTORS IN YOUR PRESENT JOB	7	10	9	18	18	29
6 405	GI-52 DO YOU INSPECT TRANSISTORS	4	7	6	16	14	20
6 406	GI-53 DO YOU REMOVE OR REPLACE TRANSISTORS	2	3	2	14	11	20
6 407	GI-54 DO YOU CHECK TRANSISTORS USING AN INSTRUMENT	2	3	2	9	4	14
6 408	GI-55 DO YOU USE OR REFER TO Emitter - Base (EB) FORWARD AND REVERSE RESISTANCE MEASUREMENTS	0	2	1	5	7	14
6 409	GI-56 DO YOU USE OR REFER TO COLLECTOR - BASE (CB) FORWARD AND REVERSE RESISTANCE MEASUREMENTS	0	2	1	5	4	14

TASK GROUP SUMMARY
PERCENT WORKERS PERFORMING

OVERALL	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
G 410 G2-07 DO YOU USE OR REFER TO Emitter - COLLECTOR (EC) RESISTANCE MEASUREMENTS	0	2	1	7	4	14
G 411 G2-08 DO YOU USE OR REFER TO HOW BIASING AFFECTS THE PHYSICAL BARRIER WIDTH OF THE Emitter - BASE JUNCTION	0	1	1	0	0	3
G 412 G2-09 DO YOU USE OR REFER TO HOW BIASING AFFECTS THE PHYSICAL BARRIER WIDTH OF THE COLLECTOR - BASE JUNCTION	0	1	1	0	0	3
G 413 G2-10 DO YOU USE OR REFER TO THE PHYSICAL SIZE OF THE TRANSISTOR STRUCTURE (COLLECTOR, BASE AND Emitter)	0	1	1	5	0	6
G 414 G2-11 DO YOU USE OR REFER TO LEAKAGE CURRENT (ICBO) IN A TRANSISTOR	0	0	0	0	0	3
G 415 G2-12 DO YOU USE OR REFER TO TRANSISTOR SCHEMATIC SYMBOLS	4	7	6	16	14	31
G 416 G2-13 DO YOU USE OR REFER TO TRANSISTOR NOTATION SUCH AS Q1, Q2, Q3, ETC	5	7	6	14	18	24
G 417 G2-14 DO YOU USE OR REFER TO TRANSISTOR SUBSTITUTION INFORMATION	2	0	1	2	0	9
G 418 G2-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE TRANSISTOR BASE CURRENT (IB) IS NORMALLY SIGNIFICANTLY GREATER THAN THE Emitter BASE VOLTAGE ON BASE CURRENT IS THE CONTROLLING FACTOR FOR G 420 G2-17 DO YOU USE THE GENERAL RULE THAT LEAKAGE CURRENT (ICBO) IN A TRANSISTOR INCREASES AS TEMPERATURE INCREASES	0	1	1	0	4	3
G 421 G2-18 DO YOU USE OR REFER TO TRANSISTOR CHARACTERISTIC CURVES	0	0	0	2	0	0
G 422 G2-19 DO YOU USE OR REFER TO BETA TRANSISTOR GAINS	0	0	0	0	0	0
G 423 G2-20 DO YOU USE OR REFER TO ALPHA TRANSISTOR GAINS	0	0	0	0	0	0
G 424 G2-21 DO YOU USE OR REFER TO GAMMA TRANSISTOR GAINS	0	0	0	0	0	0
G 425 G2-22 DO YOU CALCULATE BETA TRANSISTOR GAINS	0	0	0	0	0	0
G 426 G2-23 DO YOU CALCULATE ALPHA TRANSISTOR GAINS	0	0	0	0	0	0
G 427 G2-24 DO YOU CALCULATE GAMMA TRANSISTOR GAINS	0	0	0	0	0	0
G 428 G3-01 DO YOU WORK WITH TRANSISTOR AMPLIFIERS IN YOUR PRESENT JOB	0	3	2	7	7	11
G 429 G3-02 DO YOU INSPECT TRANSISTOR AMPLIFIERS	0	1	1	7	7	6
G 430 G3-03 DO YOU ALIGN OR ADJUST TRANSISTOR AMPLIFIERS	0	2	1	5	7	3
G 431 G3-04 DO YOU TROUBLESHOOT TO THE AMPLIFIER CIRCUIT LEVEL	0	1	1	7	7	6
G 432 G3-05 DO YOU TROUBLESHOOT TO AMPLIFIER COMPONENTS	0	0	0	7	4	3
G 433 G3-06 DO YOU REMOVE OR REPLACE THE COMPLETE AMPLIFIER	0	2	1	7	7	6
G 434 G3-07 DO YOU REMOVE OR REPLACE AMPLIFIER COMPONENTS	0	0	0	2	0	3
G 435 G3-08 DO YOU USE OR REFER TO (COMMON Emitter) THE CHANGE IN COLLECTOR CURRENT WHICH RESULTS FROM A CHANGE IN BASE	0	0	0	0	0	0
G 436 G3-09 DO YOU USE OR REFER TO (COMMON Emitter) THE CALCULATIONS, NECESSARY TO MEASURE THE SPECIFIC CHANGE IN	0	0	0	0	0	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

D-15K

	SPL 004	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
G 454 GJ-27 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITY THE COMPONENTS ASSOCIATED WITH	0	0	0	0	0	0
G 455 GJ-28 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITY THE COMPONENTS ASSOCIATED WITH	0	1	1	0	0	0
G 456 GJ-29 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITY THE COMPONENTS ASSOCIATED WITH	0	1	0	0	0	0
G 457 GJ-30 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITY THE COMPONENTS ASSOCIATED WITH	0	1	0	0	0	0
G 458 GJ-31 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM Emitter IS (AMPLIFI) RESISTOR STABILIZATION	0	0	0	0	0	0
G 459 GJ-32 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM SELF-BIAS STABILIZATION	0	1	1	0	0	3
G 460 GJ-33 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM THERMISTOR STABILIZATION	0	0	0	0	0	6
G 461 GJ-34 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM FORWARD BIAS DIODE STABILIZATION	0	1	1	0	4	3
G 462 GJ-35 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM REVERSE BIAS DIODE STABILIZATION	0	1	1	0	4	3
G 463 GJ-36 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM DOUBLE DIODE STABILIZATION	0	1	1	0	0	0
G 464 GJ-37 DO YOU IDENTIFY AMPLITUDE DISTORTION FOR TRANSISTOR CIRCUITS	0	1	1	0	0	6
G 465 GJ-38 DO YOU TROUBLESHOOT TRANSISTOR CIRCUITS TO FIND THE CAUSES OF AMPLITUDE DISTORTION	0	0	0	0	0	0
G 466 GJ-39 DO YOU IDENTIFY FREQUENCY DISTORTION FOR TRANSISTOR CIRCUITS	0	0	0	0	0	6
G 467 GJ-40 DO YOU IDENTIFY PHASE DISTORTION FOR TRANSISTOR CIRCUITS	0	0	0	0	0	0
G 468 GJ-41 DO YOU TROUBLESHOOT TRANSISTOR CIRCUITS TO FIND THE CAUSES OF PHASE DISTORTION	0	0	0	0	0	0
G 469 GJ-42 DO YOU TROUBLESHOOT TRANSISTOR CIRCUITS TO FIND THE CAUSES OF FREQUENCY DISTORTION	0	0	0	0	0	6
G 470 GJ-43 DO YOU NEED TO KNOW THE DEGENERATIVE EFFECTS ON THE CIRCUIT CAUSED BY CHANGING Emitter RESISTANCE FOR	0	0	0	0	0	0
G 471 GJ-44 DO YOU DETERMINE THE CLASS OF OPERATION FOR AMPLIFIERS IN ORDER TO TROUBLESHOOT AMPLIFIER CIRCUITS	0	1	1	0	0	6
G 472 GJ-45 DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS	0	1	0	0	3	
G 473 GJ-46 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL AMPLIFIERS	0	2	1	7	4	6
G 474 GJ-47 DO YOU TROUBLESHOOT OR REPAIR COMPLEMENTARY SYMMETRY CIRCUITS	0	1	0	0	0	0
G 475 GJ-48 DO YOU TROUBLESHOOT OR REPAIR COMPOUND-CONNECTED AMPLIFIERS	0	2	1	2	0	0

PERCENT HOURS PERCENT HOURS PERFORMING
TASK GROUP SUMMARY
PERCENT HOURS PERFORMING

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AF HUMAN RESOURCES LABORATORY
AF AIR FORCE SYSTEMS COMMAND

DAY	TASK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
G 476	G3-49 DO YOU TROUBLESHOOT OR REPAIR CASCADE-CONNECTED AMPLIFIERS	0	1	1	2	0	3
H 477	H1-01 DO YOU USE OR REFER TO VARACTORS	2	2	2	0	4	3
H 478	H1-02 DO YOU USE OR REFER TO TUNNEL DIODES	2	2	2	2	7	11
H 479	H1-03 DO YOU USE OR REFER TO FIELD-EFFECT TRANSISTORS (FET)	5	5	5	16	14	17
H 480	H1-04 DO YOU USE OR REFER TO UNIJUNCTION TRANSISTORS	5	5	5	9	14	14
H 481	H1-05 DO YOU USE OR REFER TO ZENER DIODES	7	15	12	34	25	34
H 482	H1-06 DO YOU USE OR REFER TO INTEGRATED CIRCUITS	11	30	23	36	29	31
H 483	H2-01 IN YOUR PRESENT JOB, DO YOU WORK WITH POWER SUPPLIES	50	36	41	45	39	37
H 484	H2-02 DO YOU INSPECT POWER SUPPLIES	32	29	27	36	32	39
H 485	H2-03 DO YOU CLEAN POWER SUPPLIES	23	14	18	25	11	23
H 486	H2-04 DO YOU ALIGN OR ADJUST POWER SUPPLIES	29	16	20	30	36	31
H 487	H2-05 DO YOU TROUBLESHOOT TO POWER SUPPLY CIRCUIT LEVEL	18	9	12	23	29	29
H 488	H2-06 DO YOU TROUBLESHOOT TO POWER SUPPLY COMPONENTS	9	5	6	14	11	29
H 489	H2-07 DO YOU REMOVE OR REPLACE COMPLETE POWER SUPPLIES	23	17	19	25	25	20
H 490	H2-08 DO YOU REMOVE OR REPLACE POWER SUPPLY COMPONENTS	9	4	5	16	14	23
H 491	H2-09 DO YOU WORK WITH HALF-WAVE RECTIFIERS	5	5	5	11	18	20
H 492	H2-10 DO YOU WORK WITH FULL-WAVE RECTIFIERS OTHER THAN BRIDGE RECTIFIERS	4	5	4	5	19	23
H 493	H2-11 DO YOU WORK WITH BRIDGE RECTIFIERS	5	4	4	11	18	23
H 494	H2-12 DO YOU WORK WITH THREE-PHASE RECTIFIERS	2	2	2	2	11	4
H 495	H2-13 DO YOU USE OR REFER TO INPUT VOLTAGE	18	12	13	30	14	11
H 496	H2-14 DO YOU USE OR REFER TO INPUT FREQUENCY	11	12	11	18	14	11
H 497	H2-15 DO YOU USE OR REFER TO PEAK OUTPUT VOLTAGE	16	8	10	27	19	17
H 498	H2-16 DO YOU USE OR REFER TO AVERAGE AMPLITUDE	14	4	9	18	7	23
H 499	H2-17 DO YOU USE OR REFER TO RIPPLE AMPLITUDE	2	2	2	7	4	11
H 500	H2-18 DO YOU USE OR REFER TO RIPPLE FREQUENCY	0	2	1	5	4	9
H 501	H2-19 DO YOU USE OR REFER TO PEAK REVERSE (INVERSE) VOLTAGE	0	4	2	0	0	14
H 502	H2-20 DO YOU USE OR REFER TO SHAPE OF OUTPUT WAVEFORMS	7	6	6	20	14	17
H 503	H2-21 DO YOU USE OR REFER TO EFFECTIVE OUTPUT VOLTAGE	13	7	9	18	7	26
H 504	H2-22 DO YOU WORK WITH CIRCUITS WHICH EMPLOY CAPACITIVE FILTERS	2	3	2	9	21	17
H 505	H2-23 DO YOU WORK WITH CIRCUITS WHICH EMPLOY INDUCTIVE FILTERS	2	2	2	11	19	11
H 506	H2-24 DO YOU WORK WITH CIRCUITS WHICH EMPLOY CAPACITIVE INPUT L-TYPE FILTERS	2	2	2	5	7	9
H 507	H2-25 DO YOU WORK WITH CIRCUITS WHICH EMPLOY INDUCTIVE INPUT L-TYPE FILTERS	2	1	1	5	0	9
H 508	H2-26 DO YOU WORK WITH CIRCUITS WHICH EMPLOY LC PI-TYPE FILTERS	4	1	2	0	4	6
H 509	H2-27 DO YOU WORK WITH CIRCUITS WHICH EMPLOY RC PI-TYPE FILTERS	2	2	2	0	4	9
H 510	H2-28 DO YOU WORK WITH CIRCUITS WHICH EMPLOY DON'T REMEMBER WHICH TYPE OF FILTER	14	7	9	16	25	11
H 511	H2-29 DO YOU HAVE THE OPTION OF REPLACING ONE TYPE OF FILTER WITH A DIFFERENT TYPE FILTER	0	0	0	0	0	3
H 512	H3-01 DO YOU WORK WITH OSCILLATORS IN YOUR PRESENT JOB	2	3	2	7	7	6

TASK GROUP SUMMARY
PRESENT MEMBERS PERFORMING

Q-Y-TASK

	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
H 513 HJ-02 DO YOU INSPECT OSCILLATORS	2	2	2	5	7	6
H 514 HJ-03 DO YOU ALIGN OR ADJUST OSCILLATORS	2	3	2	7	7	3
H 515 HJ-04 DO YOU REMOVE OR REPLACE COMPLETE OSCILLATORS	2	2	2	7	7	0
H 516 HJ-05 DO YOU REMOVE OR REPLACE OSCILLATOR COMPONENTS	0	1	1	2	0	0
H 517 HJ-06 DO YOU TROUBLESHOOT TO OSCILLATOR CIRCUIT LEVEL	2	2	2	7	7	0
H 518 HJ-07 DO YOU TROUBLESHOOT TO OSCILLATOR COMPONENTS	0	1	1	2	0	3
H 519 HJ-08 DO YOU USE OR REFER TO FEEDBACK	0	2	1	0	11	9
H 520 HJ-09 DO YOU USE OR REFER TO FREQUENCY DETERMINING DEVICES (FDD)	0	2	1	0	11	0
H 521 HJ-10 DO YOU USE OR REFER TO AMPLITUDE STABILITY	0	2	1	0	4	3
H 522 HJ-11 DO YOU USE OR REFER TO FREQUENCY STABILITY	0	2	1	0	4	3
H 523 HJ-12 DO YOU USE OR REFER TO DAMPING	0	2	1	0	7	3
H 524 HJ-13 DO YOU USE OR REFER TO REGENERATIVE FEEDBACK	0	2	1	0	7	6
H 525 HJ-14 DO YOU USE OR REFER TO PIEZOELECTRIC EFFECT	2	2	2	0	7	3
H 526 HJ-15 DO YOU USE OR REFER TO CRITICAL DAMPING	0	1	1	0	0	3
H 527 HJ-16 DO YOU USE OR REFER TO UNDER DAMPING	0	2	1	0	0	3
H 528 HJ-17 DO YOU USE OR REFER TO OVER DAMPING	0	2	1	0	0	3
H 529 HJ-18 DO YOU WORK WITH OSCILLATORS WHICH USE LC TANK CIRCUITS AS FDD	0	1	1	0	7	3
H 530 HJ-19 DO YOU WORK WITH OSCILLATORS WHICH USE RC NETWORKS AS FDD	0	1	1	0	7	3
H 531 HJ-20 DO YOU WORK WITH OSCILLATORS WHICH USE CRYSTALS AS FDD	0	2	1	0	7	3
H 532 HJ-21 DO YOU WORK WITH OSCILLATORS WHICH USE DON'T REMEMBER WHICH TYPE OF FDD	5	1	2	5	4	0
H 533 HJ-22 DO YOU WORK WITH SERIES HARTLEY SINUSOIDAL OSCILLATORS	0	1	1	0	0	3
H 534 HJ-23 DO YOU WORK WITH SHUNT HARTLEY SINUSOIDAL OSCILLATORS	0	1	1	0	0	3
H 535 HJ-24 DO YOU WORK WITH COLPITTS SINUSOIDAL OSCILLATORS	0	1	1	0	0	3
H 536 HJ-25 DO YOU WORK WITH CLAPP SINUSOIDAL OSCILLATORS	0	1	1	0	0	0
H 537 HJ-26 DO YOU WORK WITH BUTLER SINUSOIDAL OSCILLATORS	0	0	0	0	0	0
H 538 HJ-27 DO YOU WORK WITH DON'T REMEMBER WHICH TYPE OF OSCILLATORS	5	1	2	5	7	0
I 539 IJ-01 DO YOU WORK WITH MULTIVIBRATORS IN YOUR PRESENT JOB	0	3	2	0	14	3
I 540 IJ-02 DO YOU INSPECT WAVE GENERATING OR SHAPING CIRCUITS	0	3	2	0	7	3
I 541 IJ-03 DO YOU ALIGN OR ADJUST WAVE GENERATING OR SHAPING CIRCUITS	0	3	2	0	11	6
I 542 IJ-04 DO YOU CALIBRATE WAVE GENERATING OR SHAPING CIRCUITS	0	3	2	0	7	6
I 543 IJ-05 DO YOU TROUBLESHOOT TO WAVE GENERATING OR SHAPING CIRCUITS	0	3	2	0	14	3
I 544 IJ-06 DO YOU TROUBLESHOOT TO WAVE GENERATING OR SHAPING CIRCUIT COMPONENTS	0	2	1	0	11	3
I 545 IJ-07 DO YOU REMOVE OR REPLACE COMPLETE WAVE GENERATING OR SHAPING CIRCUITS	0	3	2	0	14	3
I 546 IJ-08 DO YOU REMOVE OR REPLACE WAVE GENERATING OR SHAPING COMPONENTS	0	0	0	0	4	3
I 547 IJ-09 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN LC TANK CIRCUITS	0	1	1	0	11	3

TASK GROUP SUMMARY PERCENT MEMBERS PERFORMING

		SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
1 548	11-10 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN RC NETWORKS	0	1	1	0	11	6
1 549	11-11 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN CRYSTALS	0	2	1	0	7	3
1 550	11-12 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN DON'T REMEMBER WHICH TYPE OF FOO	0	2	1	2	7	0
1 551	11-13 DO YOU WORK WITH ASTABLE MULTIVIBRATORS	0	0	0	0	4	3
1 552	11-14 DO YOU WORK WITH MONOSTABLE MULTIVIBRATORS	0	0	0	0	7	3
1 553	11-15 DO YOU WORK WITH BI-STABLE MULTIVIBRATORS	0	0	0	0	7	3
1 554	11-16 DO YOU WORK WITH DON'T REMEMBER WHICH TYPE MULTIVIBRATORS	0	3	2	2	11	3
1 555	12-01 DO YOU WORK WITH LIMITERS OR CLAMPERS IN YOUR PRESENT JOB	0	1	1	0	14	3
1 556	12-02 DO YOU WORK WITH SERIES DIODE LIMITERS	0	1	1	0	4	3
1 557	12-03 DO YOU WORK WITH SHUNT DIODE LIMITERS	0	1	1	0	11	3
1 558	12-04 DO YOU WORK WITH LIMITERS WITH BIAS	0	0	0	0	7	3
1 559	12-05 DO YOU WORK WITH ZENER DIODE LIMITERS	0	1	1	0	7	6
1 560	12-06 DO YOU WORK WITH TRANSISTOR LIMITERS	0	1	1	0	4	3
1 561	12-07 DO YOU WORK WITH DON'T KNOW WHICH TYPE OF LIMITERS	0	0	0	0	7	3
1 562	12-08 DO YOU WORK WITH BASIC DIODE CLAMPING CIRCUITS	0	0	0	0	4	3
1 563	12-09 DO YOU WORK WITH DIODE CLAMPING CIRCUITS WITH BIAS	0	0	0	0	4	3
1 564	12-10 DO YOU WORK WITH DON'T KNOW WHICH TYPE OF CLAMPING CIRCUIT	0	1	0	4	0	0
1 565	13-01 IN YOUR PRESENT JOB, DO YOU WORK ON EQUIPMENT WHICH CONTAINS ELECTRON TUBES	0	5	3	2	0	14
1 566	13-02 DO YOU CHECK ELECTRON TUBES TO SEE IF THEY ARE GOOD	0	3	2	0	0	6
1 567	13-03 DO YOU USE TUBE TESTERS TO CHECK ELECTRON TUBES	0	2	1	0	0	4
1 568	13-04 DO YOU USE MULTIMETERS TO CHECK ELECTRON TUBES	0	3	2	0	0	6
1 569	13-05 DO YOU USE SCOPES TO CHECK ELECTRON TUBES	0	3	2	0	0	4
1 570	13-06 DO YOU USE SUBSTITUTION TO CHECK ELECTRON TUBES	0	3	2	0	0	9
1 571	13-07 DO YOU USE OR REFER TO CUTOFF	0	1	1	0	0	3
1 572	13-08 DO YOU USE OR REFER TO PEAK INVERSE VOLTAGE RATING	0	1	1	0	0	3
1 573	13-09 DO YOU USE OR REFER TO PEAK CURRENT RATING	0	1	1	0	0	3
1 574	13-10 DO YOU USE OR REFER TO TRANSIT TIME	0	0	0	0	0	0
1 575	13-11 DO YOU USE OR REFER TO PLATE DISSIPATION RATING	0	0	0	0	0	3
1 576	13-12 DO YOU USE OR REFER TO SATURATION	0	1	1	0	0	3
1 577	13-13 DO YOU USE OR REFER TO DC PLATE RESISTANCE	0	0	0	0	0	3
1 578	13-14 DO YOU COMPUTE ACTUAL VALUES OF THE DC PLATE RESISTANCE FOR ELECTRON TUBES	0	0	0	0	0	0
1 579	13-15 DO YOU USE OR REFER TO PLATE VOLTAGE	0	2	1	2	0	3
1 580	13-16 DO YOU USE OR REFER TO PLATE CURRENT	0	2	1	2	0	3
1 581	13-17 DO YOU USE OR REFER TO GRID VOLTAGE	0	2	1	2	0	3
1 582	13-18 DO YOU USE OR REFER TO GRID CURRENT	0	2	1	2	0	3
1 583	13-19 DO YOU USE OR REFER TO CATHODE VOLTAGE	0	2	1	2	0	3
1 584	13-20 DO YOU USE OR REFER TO CATHODE CURRENT	0	2	1	2	0	3
1 585	13-21 DO YOU USE OR REFER TO THE TRIODE AMPLIFICATION FACTOR (THE AMPLIFICATION FACTOR FOR TRIODES IS DEFINED AS	0	0	0	0	0	3

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DYSK.

	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
1 586 13-22 DO YOU CALCULATE ACTUAL VALUES OF TRIODE AMPLIFICATION FACTORS	0	0	0	0	0	0
1 587 13-23 DO YOU USE OR REFER TO MULTIGRID (TETRODE, PENTODE, ETC) AMPLIFICATION FACTORS	0	0	0	0	0	3
1 588 13-24 DO YOU USE OR REFER TO ELECTRON TUBE TRANSDUCTANCE (¹⁶ WHICH IS MEASURED IN MHOS)	0	0	0	0	0	0
1 589 13-25 DO YOU CALCULATE ACTUAL VALUES OF ELECTRON TUBE TRANSDUCTANCES	0	0	0	0	0	0
1 590 13-26 DO YOU USE OR REFER TO THE ELECTRON TUBE PARAMETER CALLED AC PLATE RESISTANCE	0	0	0	0	0	3
1 591 13-27 DO YOU CALCULATE ACTUAL VALUES OF AC PLATE RESISTANCE	0	0	0	0	0	0
1 592 13-28 DO YOU USE OR REFER TO ELECTRON TUBE INTERELECTRODE CAPACITANCE	0	0	0	0	0	3
1 593 13-29 DO YOU USE OR REFER TO CHARACTERISTIC CURVES IN YOUR WORK WITH ELECTRON TUBES	0	0	0	0	0	3
1 594 13-30 DO YOU USE CHARACTERISTIC CURVES TO SELECT PLATE VOLTAGE FOR A SPECIFIED BIAS	0	0	0	0	0	3
1 595 13-31 DO YOU USE CHARACTERISTIC CURVES TO SELECT PLATE CURRENT FOR A SPECIFIED BIAS	0	0	0	0	0	0
1 596 13-32 DO YOU USE CHARACTERISTIC CURVES TO SELECT BIAS REQUIRED FOR CUTOFF	0	0	0	0	0	3
1 597 13-33 DO YOU USE CHARACTERISTIC CURVES TO SELECT BIAS REQUIRED FOR SATURATION	0	0	0	0	0	3
1 598 13-34 DO YOU USE OR REFER TO ELECTRON TUBE AMPLIFIER GAIN	0	2	1	0	0	3
1 599 13-35 DO YOU USE OR REFER TO ELECTRON TUBE AMPLIFIER EFFICIENCY	0	1	1	0	0	3
1 600 13-36 DO YOU USE TEST TUBE CHECKERS TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN	0	2	1	0	0	3
1 601 13-37 DO YOU USE MULTIMETERS TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN	0	2	1	0	0	0
1 602 13-38 DO YOU USE OSCILLOSCOPES TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN	0	2	1	0	0	0
1 603 13-39 DO YOU USE CHARACTERISTIC CURVES TO DETERMINE ELECTRON TUBE AMPLIFIER GAIN	0	0	0	0	0	3
1 604 13-40 DO YOU CALCULATE ANY ELECTRON TUBE CAPACITANCES SUCH AS INPUT CAPACITANCE	0	0	0	0	0	0
1 605 13-41 DO YOU USE OR REFER TO TUBE SOCKET NOTATION	0	2	1	0	0	9
1 606 13-42 DO YOU USE OR REFER TO PIN NUMBERING SYSTEMS	0	2	1	0	0	9
1 607 13-43 DO YOU USE OR REFER TO THE TYPE OF MATERIAL OR THE OPERATING TEMPERATURE OF THE EMITTING SURFACE IN THE	0	0	0	0	0	0
1 608 13-44 DO YOU USE OR REFER TO TUBE SUBSTITUTION MATERIAL SUCH AS MANUALS OR CHARTS	0	2	1	0	0	9
1 609 13-45 DO YOU WORK WITH ELECTRON TUBE AMPLIFIERS OR CIRCUITS IN YOUR PRESENT JOB	0	2	1	0	4	3
1 610 13-46 DO YOU DETERMINE THE CLASS OF OPERATION FOR ELECTRON TUBE AMPLIFIERS IN ORDER TO TROUBLESHOOT AMPLIFIER	0	1	1	0	0	3

TASK GROUP SUMMARY PERCENT MEMBERS PRESENT

			SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
J 611	J1-03	DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS	0	1	1	0	0	3
J 612	J1-04	DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL AMPLIFIERS	0	2	1	0	0	3
J 613	J1-05	DO YOU TROUBLESHOOT OR REPAIR COMPOUND-CONNECTED AMPLIFIERS	0	1	1	0	0	0
J 614	J1-06	DO YOU TROUBLESHOOT OR REPAIR CASCADE-CONNECTED AMPLIFIERS	0	1	1	0	0	1
J 615	J1-07	DO YOU TROUBLESHOOT OR REPAIR DON'T KNOW WHICH TYPE OF AMPLIFIER	0	2	1	0	0	0
J 616	J2-01	DO YOU WORK WITH GAS TUBES (HOT CATHODE OR COLD CATHODE)	0	1	1	0	0	4
J 617	J2-02	DO YOU WORK WITH CATHODE-RAY TUBES	7	5	5	7	4	9
J 618	J2-03	DO YOU USE OR REFER TO THE CHARACTERISTICS OF BEAM POWER TUBES	0	0	0	0	0	0
J 619	J2-04	DO YOU TROUBLESHOOT OR REPAIR CIRCUITS IN WHICH BEAM POWER TUBES ARE USED	0	0	0	0	0	0
J 620	J2-05	DO YOU USE OR REFER TO THE CHARACTERISTICS OF THYRATRONS	0	1	1	0	0	3
J 621	J2-06	DO YOU TROUBLESHOOT OR RFP-IR CIRCUITS IN WHICH THYRATRONS ARE USED	0	1	1	0	0	3
J 622	J2-07	DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTRON GUNS OF CATHODE-RAY TUBES (CRT)	4	1	2	5	7	3
J 623	J2-08	DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTROMAGNETIC DEFLECTION SYSTEMS OF CATHODE-RAY TUBES	4	1	2	2	4	3
J 624	J2-09	DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTROSTATIC DEFLECTION SYSTEMS OF CATHODE-RAY TUBES	4	1	2	2	0	3
J 625	J2-10	DO YOU USE OR REFER TO PHOSPHOR SCREENS	2	0	1	2	4	6
J 626	J2-11	DO YOU USE OR REFER TO AVALAD COATINGS	0	0	1	0	4	0
J 627	J2-12	DO YOU USE OR REFER TO ELECTRON OPTICS	0	0	0	0	4	6
J 628	J2-13	DO YOU USE OR REFER TO PERSISTENCE	0	0	0	0	4	3
J 629	J2-14	DO YOU USE OR REFER TO DECAY TIMES	0	0	0	0	0	3
J 630	J2-15	DO YOU USE OR REFER TO FLUORESCENCE	0	1	1	0	0	6
J 631	J2-16	DO YOU USE OR REFER TO PHOSPHORESCENCE	2	1	0	4	6	6
J 632	J3-01	DO YOU WORK ON TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB	7	3	4	2	4	3
J 633	J3-02	DO YOU PERFORM TASKS ON FREQUENCY CONVERTERS	2	1	1	0	0	3
J 634	J3-03	DO YOU PERFORM TASKS ON FREQUENCY MIXERS	2	0	1	0	0	3
J 635	J3-04	DO YOU USE OR REFER TO THE HETERODYNING OF SIGNALS IN YOUR WORK WITH TRANSMIT OR RECEIVE SYSTEMS	2	0	1	0	4	3
J 636	J3-05	DO YOU PERFORM TASKS ON REACTANCE MODULATORS	0	0	0	0	0	0
J 637	J3-06	DO YOU PERFORM TASKS ON MODULATED OSCILLATORS	0	0	0	0	0	0
K 638	K1-01	DO YOU WORK ON AN TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB	0	2	1	0	0	0
K 639	K1-02	DO YOU INSPECT AND TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0
K 640	K1-03	DO YOU ALIGN AND TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0
K 641	K1-04	DO YOU ALIGN OR ADJUST AND TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DUTY TASK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
	0	0	0	0	0	0
K 642 K1-05 DO YOU TROUBLESHOOT TO AM TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0
K 643 K1-06 DO YOU TROUBLESHOOT TO AM TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0
K 644 K1-07 DO YOU REMOVE OR REPLACE AM TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0
K 645 K1-08 DO YOU REMOVE OR REPLACE AM TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0
K 646 K1-09 DO YOU PERFORM TASKS ON RF OSCILLATORS	0	0	0	0	0	0
K 647 K1-10 DO YOU PERFORM TASKS ON RF AMPLIFIERS	0	2	1	0	0	0
K 648 K1-11 DO YOU PERFORM TASKS ON AUDIO AMPLIFIERS	0	0	0	0	0	0
K 649 K1-12 DO YOU PERFORM TASKS ON POWER AMPLIFIERS	0	0	0	0	0	0
K 650 K1-13 DO YOU PERFORM TASKS ON LOCAL OSCILLATORS	0	0	0	0	0	0
K 651 K1-14 DO YOU PERFORM TASKS ON IF AMPLIFIERS	0	0	0	0	0	0
K 652 K1-15 DO YOU PERFORM TASKS ON DETECTORS	0	0	0	0	0	0
K 653 K1-16 DO YOU PERFORM TASKS ON DONT REMEMBER WHICH AM STAGE	0	0	0	0	0	0
K 654 K1-17 DO YOU USE OR REFER TO AMPLITUDE STABILIZATION IN TRANSMITTERS	0	0	0	0	0	0
K 655 K1-18 DO YOU USE OR REFER TO FREQUENCY STABILIZATION IN TRANSMITTERS	0	0	0	0	0	0
K 656 K1-19 DO YOU USE OR REFER TO SENSITIVITY OF RECEIVERS	0	0	0	0	0	0
K 657 K1-20 DO YOU USE OR REFER TO SELECTIVITY OF RECEIVERS	0	0	0	0	0	0
K 658 K1-21 DO YOU USE OR REFER TO 2ND HARMONIC DISTORTION	0	0	0	0	0	0
K 659 K1-22 DO YOU USE OR REFER TO BANDPASS DISTORTION	0	0	0	0	0	0
K 660 K1-23 DO YOU USE OR REFER TO SQUARE LAW DISTORTION	0	0	0	0	0	0
K 661 K1-24 DO YOU USE OR REFER TO CO-CHANNEL INTERFERENCE	0	0	0	0	0	0
K 662 K1-25 DO YOU USE OR REFER TO IMAGE FREQUENCIES IN RECEIVERS	0	0	0	0	0	0
K 663 K1-26 DO YOU USE OR REFER TO SIGNAL TO IMAGE RATIOS OR IMAGE REJECTION RATIOS	0	0	0	0	0	0
K 664 K1-27 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH AM TRANSMITTER SCHEMATIC DIAGRAMS	0	0	0	0	0	0
K 665 K1-28 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH AM RECEIVER SCHEMATIC DIAGRAMS	0	0	0	0	0	0
K 666 K2-01 DO YOU WORK WITH FM TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB	4	1	2	0	4	3
K 667 K2-02 DO YOU INSPECT FM TRANSMIT OR RECEIVE SYSTEMS	2	0	1	0	4	3
K 668 K2-03 DO YOU CLEAN FM TRANSMIT OR RECEIVE SYSTEMS	2	0	1	0	4	0
K 669 K2-04 DO YOU ALIGN FM TRANSMIT OR RECEIVE SYSTEMS	4	0	1	0	0	0
K 670 K2-05 DO YOU TROUBLESHOOT TO FM TRANSMIT OR RECEIVE SYSTEMS	2	0	1	0	0	3
K 671 K2-06 DO YOU TROUBLESHOOT TO FM TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	3
K 672 K2-07 DO YOU REMOVE OR REPLACE FM TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0
K 673 K2-08 DO YOU REMOVE OR REPLACE FM TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0
K 674 K2-09 DO YOU PERFORM TASKS ON JUNIOR AMPLIFIERS	0	0	0	0	0	3
K 675 K2-10 DO YOU PERFORM TASKS ON FREQUENCY MULTIPLIERS	0	0	0	0	0	3

HCI MHS PERFORM TASKS BY APPLICABLE GROUPS
TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DRTASK	SPL					
	006	007	008	009	010	011
K 676 K2-11 DO YOU PERFORM TASKS ON DRIVERS (INTERMEDIATE AMPLIFIERS)	0	0	0	0	0	3
K 677 K2-12 DO YOU PERFORM TASKS ON POWER AMPLIFIERS	0	0	0	0	0	3
K 678 K2-13 DO YOU PERFORM TASKS ON HF AMPLIFIERS	0	0	0	0	0	3
K 679 K2-14 DO YOU PERFORM TASKS ON FREQUENCY CONVERTERS	0	0	0	0	0	3
K 680 K2-15 DO YOU PERFORM TASKS ON IF AMPLIFIERS	0	0	0	0	0	3
K 681 K2-16 DO YOU PERFORM TASKS ON LIMITERS	0	0	0	0	0	3
K 682 K2-17 DO YOU PERFORM TASKS ON FREQUENCY DISCRIMINATORS	0	0	0	0	0	3
K 683 K2-18 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM TRANSMITTERS	0	0	0	0	0	3
K 684 K2-19 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SCHEMATIC DIAGRAMS OF FM RECEIVERS	0	0	0	0	0	3
K 685 K3-01 DO YOU CONVERT DECIMAL (BASE 10) NUMBERS TO OCTAL (BASE 8) NUMBERS	0	1	0	0	0	3
K 686 K3-02 DO YOU CONVERT DECIMAL NUMBERS TO BINARY (BASE 2)	0	4	2	0	4	4
K 687 K3-03 DO YOU CONVERT OCTAL NUMBERS TO DECIMAL NUMBERS	0	1	0	0	0	0
K 688 K3-04 DO YOU CONVERT OCTAL NUMBERS TO BINARY NUMBERS	0	0	0	0	0	0
K 689 K3-05 DO YOU CONVERT BINARY NUMBERS TO DECIMAL NUMBERS	0	3	2	0	4	3
K 690 K3-06 DO YOU CONVERT BINARY NUMBERS TO OCTAL NUMBERS	0	0	0	0	0	0
K 691 K3-07 DO YOU ADD BINARY NUMBERS TO GET A SUM	0	5	0	0	4	9
K 692 K3-08 DO YOU SUBTRACT BINARY NUMBERS USING THE END-AROUND- CARRY METHOD	0	2	1	0	0	0
K 693 K3-09 DO YOU SUBTRACT BINARY NUMBERS USING THE DIRECT SUBTRACTION METHOD	0	2	1	0	0	0
K 694 K3-10 DO YOU ADD OCTAL NUMBERS TO GET A SUM	0	0	0	0	0	0
L 695 L1-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS RELATING TO LOGIC FUNCTIONS	4	6	6	11	21	11
L 696 L1-02 DO YOU CONSTRUCT TRUTH TABLES FOR AND LOGIC SYMBOLS	4	4	3	2	7	3
L 697 L1-03 DO YOU CONSTRUCT TRUTH TABLES FOR OR LOGIC SYMBOLS OR GATES	4	4	3	2	4	3
L 698 L1-04 DO YOU CONSTRUCT TRUTH TABLES FOR AND OR LOGIC SYMBOLS WITH STATE INDICATORS	4	3	2	4	3	3
L 699 L1-05 DO YOU CONSTRUCT TRUTH TABLES FOR EXCLUSIVE OR LOGIC SYMBOLS OR GATES	4	3	0	4	3	3
L 700 L1-06 DO YOU USE OR REFER TO TRUTH TABLES FOR AND LOGIC SYMBOLS OR GATES	4	7	6	5	18	6
L 701 K1-07 DO YOU USE OR REFER TO TRUTH TABLES FOR OR LOGIC SYMBOLS OR GATES	4	7	6	5	14	6
L 702 K1-08 DO YOU USE OR REFER TO TRUTH TABLES FOR AND OR LOGIC SYMBOLS WITH STATE INDICATORS	4	6	5	5	14	6
L 703 L1-09 DO YOU USE OR REFER TO TRUTH TABLES FOR EXCLUSIVE OR LOGIC SYMBOLS	4	5	5	2	14	6
L 704 L1-10 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR AND GATES	4	6	6	7	18	6
L 705 L1-11 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR OR GATES	4	8	6	7	14	6
L 706 L1-12 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR NAND OR NOR GATES	4	6	9	8	18	11

PERCENT MEMBERS PRACTICING

CIRCUITS

	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
L 707 L-13 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR EXCLUSIVE OR GATES	4	7	6	7	14	6
L 708 L-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS RELATED TO BOOLEAN EQUATIONS, LOGIC DIAGRAMS, OR LOGIC	0	3	2	2	7	4
L 709 L-02 DO YOU DRAW LOGIC SYMBOLS FOR DIRECT-COUPLED TRANSISTOR LOGIC (DCTL) CIRCUITS	0	0	0	0	0	0
L 710 L-2-03 DO YOU CONSTRUCT TRUTH TABLES FOR CURRENT-MODE LOGIC (CML) CIRCUITS	0	1	1	0	0	0
L 711 L-2-34 DO YOU DRAW LOGIC DIAGRAMS FROM GIVEN BOOLEAN EQUATIONS	0	0	0	0	0	0
L 712 L-2-05 DO YOU MEASURE INPUTS OR OUTPUTS OF LOGIC GATES	0	2	1	0	7	3
L 713 L-2-06 DO YOU DEVELOP OR ANALYZE BOOLEAN EQUATIONS IN THE PROCESS OF TROUBLESHOOTING DIGITAL CIRCUITS	0	1	1	0	0	0
L 714 L-2-07 DO YOU ANALYZE LOGIC CIRCUITS BY USING BOOLEAN ALGEBRA	0	1	1	0	4	0
L 715 L-08 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR DIRECT-COUPLED TRANSISTOR LOGIC (DCTL) CIRCUIT GATES	0	2	1	0	0	3
L 716 L-09 DO YOU USE OR REFER TO TRUTH TABLES FOR CURRENT-MODE LOGIC (CML) CIRCUITS	0	2	1	0	0	3
L 717 L-10 DO YOU USE OR REFER TO LOGIC DIAGRAMS CONSISTING OF MORE THAN ONE GATE	0	3	2	0	4	6
L 718 L-2-11 DO YOU COMPUTE SUM AND CARRY EXPRESSIONS FOR SERIAL HALF OR FULL ADDER LOGIC DIAGRAMS	0	0	0	0	0	0
L 719 L-2-12 DO YOU TRACE DATA FLOW THROUGH PARALLEL FULL ADDER LOGIC DIAGRAMS	0	0	0	0	0	0
L 720 L-2-13 DO YOU WORK WITH ASTABLE (FREE-RUNNING) MULTIVIBRATORS	0	1	1	0	4	3
L 721 L-2-14 DO YOU WORK WITH BISTABLE (FLIP-FLOP) MULTIVIBRATORS	0	3	2	0	11	3
L 722 L-2-15 DO YOU WORK WITH MONOSTABLE (ONE-SHOT) MULTIVIBRATORS	0	1	1	0	7	3
L 723 L-2-16 DO YOU USE OR REFER TO FLIP-FLOP MULTIVIBRATOR SYMBOLS	0	2	1	0	7	6
L 724 L-2-17 DO YOU USE OR REFER TO SINGLE-SHOT MULTIVIBRATOR SYMBOLS	0	1	1	0	7	3
L 725 L-18 DO YOU USE OR REFER TO FLIP-FLOP CIRCUIT DIAGRAMS	0	2	1	2	11	3
L 726 L-19 DO YOU USE OR REFER TO FLIP-FLOP TRUTH TABLES	0	2	1	0	7	6
L 727 L-2-20 DO YOU USE OR REFER TO COMPLEMENTED FLIP-FLOP LOGIC SYMBOLS	0	1	1	0	0	3
L 728 L-2-21 DO YOU USE OR REFER TO COMPLEMENTING FLIP-FLOP LOGIC SYMBOLS	0	1	1	0	0	3
L 729 L-2-22 DO YOU MEASURE OUTPUT WAVEFORMS OF LOGIC CIRCUITS	0	1	1	0	7	0
L 730 L-2-23 DO YOU TRACE DATA FLOW THROUGH COMPLEMENTED FLIP-FLOP SCHEMATIC DIAGRAMS	0	1	1	2	0	6
L 731 L-2-24 DO YOU TRACE DATA FLOW THROUGH COMPLEMENTING FLIP-FLOP SCHEMATIC DIAGRAMS	0	1	1	2	0	6
L 732 L-2-25 DO YOU CONSTRUCT TRUTH TABLES FOR J-K FLIP-FLOP LOGIC SYMBOLS	0	1	2	4	0	0

DR-TSK	SPL 0.06	SPL 0.07	SPL 0.08	SPL 0.09	SPL 0.10	SPL 0.11
1. 734 L3-02 DO YOU WORK WITH DIGITAL COUNTERS IN YOUR PRESENT JOB	1.8	2.3	2.0	1.6	1.4	1.4
2. 735 L3-03 DO YOU USE OR REFER TO UP-COUNTERS	4	5	5	2	4	4
3. 736 L3-04 DO YOU USE OR REFER TO DOWN-COUNTERS	4	6	5	2	7	3
4. 737 L3-05 DO YOU USE OR REFER TO SERIAL COUNTERS	2	4	3	2	0	0
5. 738 L3-06 DO YOU USE OR REFER TO PARALLEL COUNTERS	0	2	1	0	0	0
6. 739 L3-07 DO YOU USE OR REFER TO RING COUNTERS	0	1	0	0	0	0
7. 740 L3-08 DO YOU USE OR REFER TO DECADE COUNTERS	2	6	5	7	0	0
8. 741 L3-09 DO YOU USE OR REFER TO COUNT DETECT CIRCUITS	0	2	1	0	0	0
9. 742 L3-10 DO YOU USE OR REFER TO DOWN CLOCKS	0	6	4	5	7	3
10. 743 L3-11 DO YOU USE OR REFER TO UP CLOCKS	0	7	5	4	3	3
11. 744 L3-12 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF UP-COUNTERS HAVING COMPLEMENTARY FLIP-FLOPS	0	5	3	2	0	3
12. 745 L3-13 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF SERIAL UP- OR DOWN-COUNTERS HAVING COMPLEMENTING FLIP- FLOPS	0	2	2	2	7	0
13. 746 L3-14 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF RING COUNTERS	0	0	0	0	0	0
14. 747 L3-15 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR UP-COUNTERS HAVING COMPLEMENTED FLIP-FLOPS	0	0	0	0	0	0
15. 748 L3-16 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR SERIAL UP- OR DOWN-COUNTERS HAVING COMPLEMENTED SHIFT REGISTERS	0	0	0	2	0	0
16. 749 L3-17 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF OTHER TYPE OF COUNTERS	0	0	0	0	4	4
17. 750 L3-18 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR UP-COUNTERS HAVING COMPLEMENTED FLIP-FLOPS	0	2	1	0	4	0
18. 751 L3-19 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR SERIAL UP- OR DOWN-COUNTERS HAVING COMPLEMENTED PULSES FOR SERIAL UP-COUNTERS FEEDING A PARALLEL STORAGE	0	1	0	0	0	0
19. 752 L3-20 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR SERIAL UP-COUNTERS FEEDING A PARALLEL STORAGE	0	0	0	0	0	0
20. 753 L3-21 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR OTHER TYPES OF COUNTERS	2	0	1	0	7	3
21. 754 L3-22 DO YOU CONSTRUCT TRUTH TABLES FROM LOGIC DIAGRAMS OF DECADE COUNTERS	0	0	0	0	0	0
22. 755 L3-23 DO YOU DETERMINE THE STATE OF EACH FLIP-FLOP IN RING COUNTERS FOR SPECIFIC INPUT PULSES	0	1	2	0	0	0
23. 756 L3-24 DO YOU DETERMINE THE APPROPRIATE AND GATE NECESSARY IN COUNT DETECT CIRCUITS TO INDICATE A REQUIRED COUNT	0	2	1	2	0	0
24. 757 M1-01 DO YOU WORK WITH SAWTOOTH WAVE GENERATORS	9	6	7	5	14	3
25. 758 M1-02 DO YOU WORK WITH TRAPEZOIDAL WAVE GENERATORS	0	0	0	0	0	0
26. 759 M1-03 DO YOU WORK WITH PULSED OSCILLATORS WITH REGENERATIVE FEEDBACK	0	2	1	2	7	2
27. 760 M1-04 DO YOU WORK WITH PULSED OSCILLATORS WITHOUT REGENERATIVE FEEDBACK	0	4	2	2	4	0

TASK GROUP SUMMARY
PRESENT MEMBERS PERFORMANCE

		01-TSK	SPL 004	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
M	761	H1-US DO YOU WORK WITH BLOCKING OSCILLATORS	0	2	1	2	4	3
M	762	H1-US DO YOU USE OR REFER TO RISE TIME	5	9	8	2	7	11
M	763	H1-US DO YOU USE OR REFER TO FALL OR FLYBACK TIME	2	4	3	2	11	9
M	764	H1-US DO YOU USE OR REFER TO SWEEP TIME	14	23	19	14	14	17
M	765	H1-US DO YOU USE OR REFER TO ELECTRICAL LENGTH OF SAWTOOTH	2	8	6	2	7	14
		WAVEFORMS						
M	766	H1-US DO YOU USE OR REFER TO PHYSICAL LENGTH OF SAWTOOTH	4	5	5	2	7	9
M	767	H1-US DO YOU USE OR REFER TO LINEAR SLOPE OF SAWTOOTH	2	5	3	2	7	6
M	768	H1-US DO YOU USE OR REFER TO GATE LENGTH OF SAWTOOTH	0	4	2	2	7	3
		WAVEFORMS						
M	769	H2-US DO YOU USE SIGNAL GENERATORS IN YOUR PRESENT JOB	36	46	42	50	43	34
M	770	H2-US DO YOU PERFORM OPERATIONAL CHECKS WHILE USING SIGNAL GENERATORS	27	29	27	30	39	31
M	771	H2-US DO YOU PERFORM PERIODIC MAINTENANCE SUCH AS ADJUSTING, ALIGNING, OR CALIBRATING WHILE USING SIGNAL GENERATORS	20	32	28	39	29	26
M	772	H2-US DO YOU TROUBLESHOOT TO AN ASSEMBLY OR SUBASSEMBLY WHILE USING SIGNAL GENERATORS	20	20	19	14	18	20
M	773	H2-US DO YOU TROUBLESHOOT TO THE SMALLEST REPLACEABLE COMPONENT WHILE USING SIGNAL GENERATORS	5	6	6	7	0	3
M	774	H2-US DO YOU USE AUDIO SINE-WAVE GENERATORS	29	29	29	34	32	29
M	775	H2-US DO YOU USE AUDIO NON-SINUSOIDAL WAVE GENERATORS SUCH AS SQUARE WAVE, TRIANGLE, PULSE, OR SPIKE	7	6	6	0	7	0
M	776	H2-US DO YOU USE RF GENERATORS LESS THAN 1,000 MHZ	9	13	11	9	7	17
M	777	H2-US DO YOU USE RF GENERATORS GREATER THAN 1,000 MHZ	7	6	6	9	4	3
M	778	H2-US DO YOU USE OTHER SPECIAL PURPOSE OR MULTI-FUNCTION GENERATORS	4	7	6	11	11	0
M	779	H3-US IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING WITH ALTERNATING CURRENT OR DIRECT CURRENT MOTORS OR	27	27	27	14	21	17
M	780	H3-US DO YOU INSPECT MOTORS	14	11	12	7	11	14
M	781	H3-US DO YOU CLEAN OR LUBRICATE MOTORS	4	6	5	2	4	6
M	782	H3-US DO YOU OPERATE MOTORS	20	16	17	7	14	9
M	783	H3-US DO YOU REMOVE OR REPLACE COMPLETE MOTORS	0	2	1	0	7	6
M	784	H3-US DO YOU REMOVE OR REPLACE MOTOR PARTS	0	0	0	0	0	0
M	785	H3-US DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS OF MOTORS	13	5	8	7	4	9
M	786	H3-US DO YOU TROUBLESHOOT DOWN TO COMPONENT PARTS OF MOTORS	0	0	0	0	0	3
M	787	H3-US DO YOU PERFORM ANY TASKS ON FIELD COILS	0	0	0	0	0	0
M	788	H3-US DO YOU PERFORM ANY TASKS ON ARMATURES	0	1	1	0	0	0
M	789	H3-US DO YOU PERFORM ANY TASKS ON ROTORS	0	1	1	0	0	0
M	790	H3-US DO YOU PERFORM ANY TASKS ON BRUSHES	0	1	1	2	0	0
M	791	H3-US DO YOU PERFORM ANY TASKS ON SLIP RINGS	0	0	0	0	0	0
M	792	H3-US DO YOU PERFORM ANY TASKS ON COMMUTATORS	0	1	1	0	0	0
M	793	H3-US DO YOU PERFORM ANY TASKS ON POLE PIECES	0	0	0	0	0	0

PCT MHS PERIODS BY AFMS GROUPS
 TASK GROUP SUMMARY
 PERCENT MEMBERS PERFORMING

TYPE	TASK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
N	794 M3-16 DO YOU DETERMINE OR MEASURE THE MAGNITUDE OF THE FORCE OR TORQUE CREATED BY A MOTOR	0	0	0	0	0	0
N	795 M3-17 DO YOU DETERMINE OR MEASURE THE DIRECTION OF THE MECHANICAL FORCE OR TORQUE CREATED BY A MOTOR	0	0	0	0	0	0
N	796 M3-18 DO YOU DETERMINE OR MEASURE THE MAGNITUDE OR DIRECTION OF THE INDUCED VOLTAGE IN MOTORS	0	1	1	0	0	0
N	797 M3-19 DO YOU WORK WITH SYNCHRONOUS MOTORS	0	2	1	0	1	3
N	798 M3-20 DO YOU WORK WITH INDUCTION MOTORS	5	2	3	2	7	3
N	799 M3-21 DO YOU WORK WITH SPLIT-PHASE MOTORS	2	6	5	5	7	3
N	800 M3-22 DO YOU WORK WITH SOME COMBINATION OF THE ABOVE MOTORS	4	5	5	0	4	3
N	801 M3-23 DO YOU INSPECT GENERATORS	21	20	11	19	11	11
N	802 M3-24 DO YOU CLEAN OR LUBRICATE GENERATORS	4	4	3	0	0	3
N	803 M3-25 DO YOU OPERATE GENERATORS	21	25	11	18	9	9
N	804 M3-26 DO YOU REMOVE OR REPLACE COMPLETE GENERATORS	2	2	2	2	0	3
N	805 M3-27 DO YOU REMOVE OR REPLACE GENERATOR PARTS	0	0	0	0	0	0
N	806 M3-28 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS OF GENERATORS	14	7	9	7	4	11
N	807 M3-29 DO YOU TROUBLESHOOT DOWN TO COMPONENT PARTS OF GENERATORS	0	0	0	0	0	0
N	808 N1-01 DO YOU WORK WITH METERS IN YOUR PRESENT JOB	52	67	63	41	50	51
N	809 N1-02 DO YOU CONCEPTUALIZE OR CONSIDER THE FUNCTIONS OF PERMANENT MAGNETS	7	4	5	9	7	6
N	810 N1-03 DO YOU CONCEPTUALIZE OR CONSIDER THE FUNCTIONS OF MOVING COILS	9	7	8	9	7	4
N	811 N1-04 DO YOU CONCEPTUALIZE OR CONSIDER THE FUNCTIONS OF SPIRAL SPRINGS	7	3	9	9	9	4
N	812 N1-05 DO YOU READ METER SCALES	54	66	63	39	50	51
N	813 N1-06 DO YOU EXTEND THE RANGE OF AMMETERS	5	12	9	14	7	17
N	814 N1-07 DO YOU ZERO OHMMETERS	55	65	62	41	50	54
N	815 N1-08 DO YOU ZERO AMMETERS	25	28	27	20	16	31
N	816 N1-09 DO YOU EXTEND THE RANGE OF VOLTMETERS	21	28	25	14	7	17
N	817 N1-10 DO YOU USE OR REFER TO VOLTMETER SENSITIVITY (EXPRESSED IN UNITS OF OHMS PER VOLT)	23	16	14	21	34	
N	818 N2-01 DO YOU WORK WITH SATURABLE REACTORS OR MAGNETIC AMPLIFIERS IN YOUR PRESENT JOB	0	0	0	0	7	3
N	819 N2-02 DO YOU INSPECT MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	0	0	0	0	0	3
N	820 N2-03 DO YOU CLEAN MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	0	0	0	0	0	0
N	821 N2-04 DO YOU ADJUST MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	0	0	0	0	0	0
N	822 N2-05 DO YOU TROUBLESHOOT MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	0	0	0	0	0	0
N	823 N2-06 DO YOU REMOVE OR REPLACE MAGNETIC AMPLIFIERS OR SATURABLE REACTORS	0	0	0	0	0	0
N	824 N2-07 DO YOU REMOVE OR REPLACE MAGNETIC AMPLIFIER OR SATURABLE REACTOR COMPONENTS	0	0	0	0	0	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

D-15K

	SPL U05	SPL U07	SPL U08	SPL U09	SPL U10	SPL U11
N 825 N2-09 DO YOU USE OR REFER TO HYSTERESIS CURVES OR LOOPS	0	0	0	0	4	0
N 826 N2-09 DO YOU INTERPRET SCHEMATIC DRAWINGS TO DEVELOP OUTPUT	0	0	0	0	4	0
N 827 N2-10 DO YOU MEASURE OUTPUT WAVEFORMS ACROSS REACTOR WINDINGS OR LOAD RESISTORS OF	0	0	0	0	0	0
WINDINGS OR LOAD RESISTORS OF SINGLE WINDING SATURABLE						
N 828 N2-11 DO YOU INTERPRET SCHEMATIC DRAWINGS TO DEVELOP OUTPUT	0	0	0	0	4	0
WAVEFORMS FOR MAGNETIC AMPLIFIERS						
N 829 N2-12 DO YOU USE OR REFER TO COERCIVE FORCE IN SATURABLE	0	0	0	0	0	0
REACTORS						
N 830 N2-13 DO YOU USE OR REFER TO RESIDUAL MAGNETISM IN	0	0	0	0	0	0
SATURABLE REACTORS						
N 831 N2-14 DO YOU USE OR REFER TO FLUX DENSITY IN SATURABLE	0	0	0	0	0	0
REACTORS						
N 832 N2-15 DO YOU USE OR REFER TO POINT OF SATURATION IN	0	0	0	0	0	0
SATURABLE REACTORS						
N 833 N2-16 DO YOU USE OR REFER TO SATURABLE REACTOR SCHEMATIC	0	0	0	0	4	3
SYMBOLS						
N 834 NJ-01 DO YOU WORK WITH WAVESHAPEING CIRCUITS IN YOUR PRESENT	2	4	3	5	7	3
JOB						
N 835 NJ-02 DO YOU USE OR REFER TO TRANSIENT INTERVALS	2	0	1	0	4	3
N 836 NJ-03 DO YOU USE OR REFER TO PULSE WIDTH (PWL)	2	3	2	5	4	3
N 837 NJ-04 DO YOU USE OR REFER TO PULSE RECURRENT TIME (PRT)	2	4	3	2	4	3
N 838 NJ-05 DO YOU USE OR REFER TO PULSE RECURRENT FREQUENCY	2	4	3	2	4	3
(PRF)						
N 839 NJ-06 DO YOU USE OR REFER TO DIFFERENTIATING CIRCUITS	0	0	0	0	4	0
N 840 NJ-07 DO YOU USE OR REFER TO INTEGRATING CIRCUITS	0	0	0	5	7	0
N 841 NJ-08 DO YOU USE OR REFER TO THE CLASSIFICATION OF TIME	0	0	0	0	4	3
N 842 NJ-09 DO YOU DETERMINE WHETHER AN LR OR RC CIRCUIT IS	0	0	0	0	4	0
DIFFERENTIATING OR INTEGRATING BASED ON THE TIME CONSTANT						
N 843 NJ-10 DO YOU WORK WITH SQUARE WAVE GENERATORS	2	2	2	0	0	0
N 844 NJ-11 DO YOU WORK WITH RECTANGULAR WAVE GENERATORS	2	1	1	0	0	0
N 845 OI-01 DO YOU WORK ON SINGLE SIDEBAND SYSTEMS IN YOUR	0	0	0	0	0	0
PRESNET JOB						
O 846 OI-02 DO YOU INSPECT SSB TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0
O 847 OI-03 DO YOU CLEAN SSB TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0
O 848 OI-04 DO YOU ALIGN SSB TRANSMIT OR RECEIVE SYSTEMS	0	0	0	0	0	0
O 849 OI-05 DO YOU TROUBLESHOOT TO SSB TRANSMIT OR RECEIVE	0	0	0	0	0	0
SYSTEMS						
O 850 OI-06 DO YOU TROUBLESHOOT TO SSB TRANSMIT OR RECEIVE	0	0	0	0	0	0
COMPONENTS						
O 851 OI-07 DO YOU REMOVE OR REPLACE SSB TRANSMIT OR RECEIVE	0	0	0	0	0	0
SYSTEMS						
O 852 OI-08 DO YOU REMOVE OR REPLACE SSB TRANSMIT OR RECEIVE	0	0	0	0	0	0
COMPONENTS						

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DUTY/TASK	SPL					
	004	007	008	009	010	011
0 453 01-09 DO YOU PERFORM TASKS ON SSB AUDIO AMPLIFIERS	0	0	0	0	0	0
0 454 01-10 DO YOU PERFORM TASKS ON SSB BALANCED MODULATORS	0	0	0	0	0	0
0 455 01-11 DO YOU PERFORM TASKS ON SSB CARRIER OSCILLATORS	0	0	0	0	0	0
0 456 01-12 DO YOU PERFORM TASKS ON SSB LC FILTERS	0	0	0	0	0	0
0 457 01-13 DO YOU PERFORM TASKS ON SSB CRYSTAL FILTERS	0	0	0	0	0	0
0 458 01-14 DO YOU PERFORM TASKS ON SSB MECHANICAL FILTERS	0	0	0	0	0	0
0 459 01-15 DO YOU PERFORM TASKS ON SSB OSCILLATORS	0	0	0	0	0	0
0 460 01-16 DO YOU PERFORM TASKS ON SSB MIXERS	0	0	0	0	0	0
0 461 01-17 DO YOU PERFORM TASKS ON SSB DRIVERS	0	0	0	0	0	0
0 462 01-18 DO YOU PERFORM TASKS ON SSB POWER AMPLIFIERS	0	0	0	0	0	0
0 463 01-19 DO YOU PERFORM TASKS ON SSB RF AMPLIFIERS	0	0	0	0	0	0
0 464 01-20 DO YOU PERFORM TASKS ON SSB FREQUENCY CONVERTERS	0	0	0	0	0	0
0 465 01-21 DO YOU PERFORM TASKS ON SSB LF AMPLIFIERS	0	0	0	0	0	0
0 466 01-22 DO YOU PERFORM TASKS ON SSB DEMODULATORS	0	0	0	0	0	0
0 467 01-23 DO YOU PERFORM TASKS ON SSB DONT REMEMBER WHICH SSB	0	0	0	0	0	0
SYSTEM STAGES						
0 468 01-24 DO YOU USE OR REFER TO SELECTIVE FADING	0	0	0	0	0	0
0 469 01-25 DO YOU USE OR REFER TO PEAK POWER	0	0	0	0	0	0
0 470 01-26 DO YOU USE OR REFER TO FREQUENCY STABILITY	0	0	0	0	0	0
0 471 01-27 DO YOU USE OR REFER TO RESPONSE CURVES FOR BANDWIDTH FILTERS	0	0	0	0	0	0
0 472 01-28 DO YOU CALCULATE PEAK POWER OR EFFECTIVE POWER OF SSB TRANSMITTERS	0	0	0	0	0	0
0 473 01-29 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SSB TRANSMITTER SCHEMATIC DIAGRAMS	0	0	0	0	0	0
0 474 01-30 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SSB RECEIVER SCHEMATIC DIAGRAMS	0	0	0	0	0	0
0 475 02-01 DO YOU WORK ON PULSE MODULATION SYSTEMS IN YOUR PRESENT JOB	0	0	0	0	0	0
0 476 02-02 DO YOU INSPECT PULSE MODULATION SYSTEMS	0	0	0	0	0	0
0 477 02-03 DO YOU CLEAN PULSE MODULATION SYSTEMS	0	0	0	0	0	0
0 478 02-04 DO YOU ALIGN PULSE MODULATION SYSTEMS	0	0	0	0	0	0
0 479 02-05 DO YOU TROUBLESHOOT TO PULSE MODULATION SYSTEMS	0	0	0	0	0	0
0 480 02-06 DO YOU TROUBLESHOOT TO PULSE MODULATION SYSTEMS	0	0	0	0	0	0
COMPONENTS						
0 481 02-07 DO YOU REMOVE OR REPLACE PULSE MODULATION SYSTEMS	0	0	0	0	0	0
0 482 02-08 DO YOU REMOVE OR REPLACE PULSE MODULATION SYSTEMS	0	0	0	0	0	0
0 483 02-09 DO YOU WORK ON PULSE-AMPLITUDE MODULATION (PAM)	0	0	0	0	0	0
0 484 02-10 DO YOU WORK ON PULSE-DURATION MODULATION (PDM)	0	0	0	0	0	0
0 485 02-11 DO YOU WORK ON PULSE-POSITION MODULATION (PPM)	0	0	0	0	0	0
SYSTEMS						
0 486 02-12 DO YOU WORK ON PULSE-CODE MODULATION (PCM) SYSTEMS	0	0	0	0	0	0
0 487 02-13 DO YOU WORK ON LINE-PULSING MODULATION SYSTEMS	0	0	0	0	0	0
0 488 02-14 DO YOU WORK ON DONT REMEMBER WHICH TYPE OF MODULATION SYSTEM	0	0	0	0	0	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DRAFT

	SPL 00A	SPL 007	SPL 00B	SPL 009	SPL 010	SPL 011
0 899 02-15 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM POWER SUPPLIES	0	0	0	0	0	0
0 890 02-16 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM CHARGING CHOKES AND CHARGING DIODES	0	0	0	0	0	0
0 891 02-17 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM PULSE FORMING NETWORKS	0	0	0	0	0	3
0 892 02-18 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM TIMERS	0	0	0	0	0	0
0 893 02-19 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM SWITCHES SUCH AS GAS THYRATRONS	0	0	0	0	0	0
0 894 02-20 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM PULSE TRANSFORMERS	0	0	0	0	0	0
0 895 02-21 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM TRANSMITTER TUBES	0	0	0	0	0	0
0 896 02-22 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM RF AMPLIFIERS	0	0	0	0	0	3
0 897 02-23 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM FREQUENCY CONVERTERS	0	0	0	0	0	0
0 898 02-24 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM IF AMPLIFIERS	0	0	0	0	0	3
0 899 02-25 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM DETECTORS	0	0	0	0	0	0
0 900 02-26 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM VIDEO AMPLIFIERS	0	0	0	0	0	0
0 901 02-27 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM POWER VIDEO AMPLIFIERS	0	0	0	0	0	0
0 902 02-28 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM DON'T REMEMBER WHICH PULSE MODULATION SYSTEM STAGES	0	0	0	0	0	0
0 903 02-29 DO YOU USE OR REFER TO PULSE RECURRENCE FREQUENCY (PRF)	0	0	0	0	0	3
0 904 02-30 DO YOU USE OR REFER TO PULSE RECURRENCE TIME (PRT)	0	0	0	0	0	3
0 905 02-31 DO YOU USE OR REFER TO PULSE WIDTH (PW)	0	0	0	0	0	3
0 906 02-32 DO YOU USE OR REFER TO PULSE SHAPE	0	0	0	0	0	3
0 907 02-33 DO YOU USE OR REFER TO PEAK POWER	0	0	0	0	0	3
0 908 02-34 DO YOU USE OR REFER TO AVERAGE POWER	0	0	0	0	0	3
0 909 02-35 DO YOU CALCULATE PULSE RECURRENCE TIME (PRT) OR PULSE RECURRENCE FREQUENCY (PRF)	0	0	0	0	0	0
0 910 02-36 DO YOU MEASURE PULSE RECURRENCE TIME (PRT) OR PULSE RECURRENCE FREQUENCY (PRF)	0	0	0	0	0	3
0 911 02-37 DO YOU USE FORMULAS TO CALCULATE AVERAGE POWER OR PEAK POWER OF PULSE MODULATION TRANSMIT SYSTEMS	0	0	0	0	0	3
0 912 02-38 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH PULSE MODULATION TRANSMITTER SCHEMATIC DIAGRAMS	0	0	0	0	0	3
0 913 02-39 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH PULSE MODULATION RECEIVER SCHEMATIC DIAGRAMS	0	0	0	0	0	3
0 914 03-01 DO YOU WORK WITH ANTENNAS IN YOUR PRESENT JOB	43	37	39	16	11	20
0 915 03-02 DO YOU INSPECT ANTENNAS	41	37	39	20	11	20

PCT MARKS PERCENT TASKS BY AFM 1-2-5
 TASK GROUP SUMMARY
 PERCENT MEMBERS PERFORMING

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AIR HUMAN RESOURCES LABORATORY
 AIR FORCE SYSTEMS COMMAND

	BY-TASK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
0 916 03-03 DO YOU CLEAN ANTENNAS	41	35	37	20	11	14	
0 917 03-04 DO YOU PHYSICALLY ALIGN ANTENNAS	25	23	23	9	4	6	
C 918 03-05 DO YOU ELECTRICALLY ALIGN ANTENNAS	2	10	7	0	4	3	
0 919 03-06 DO YOU TROUBLESHOOT TO ANTENNAS	13	9	10	5	7	11	
0 920 03-07 DO YOU TROUBLESHOOT TO ANTENNA COMPONENTS	4	3	3	5	4	0	
0 921 03-08 DO YOU REMOVE OR INSTALL ANTENNAS	38	34	35	20	11	14	
0 922 03-09 DO YOU REMOVE OR REPLACE COMPONENTS OF ANTENNAS	11	15	13	5	4	9	
0 923 03-10 DO YOU USE OR REFER TO TECHNICAL DATA CONTAINING REPRESENTATIONS OF ELECTRIC FIELD LINES	0	2	1	0	0	0	
0 924 03-11 DO YOU USE OR REFER TO TECHNICAL DATA CONTAINING REPRESENTATIONS OF MAGNETIC FIELD LINES	0	1	1	0	0	0	
0 925 03-12 DO YOU DETERMINE THE DIRECTION OF THE MAGNETIC LINES IN RELATION TO THE ELECTRIC LINES OF FORCE FOR ANTENNAS	0	0	0	0	0	0	
0 926 03-13 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE OF CORRECT LENGTH (HALF-WAVE) ACT AS	0	0	0	0	0	0	
0 927 03-14 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE LONGER THAN A HALF-WAVE ACT AS INDUCTIVE LOADS	0	0	0	0	0	0	
0 928 03-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE SHORTER THAN A HALF-WAVE ACT AS CAPACITIVE LOADS	5	0	2	2	0	0	
0 929 03-16 DO YOU WORK WITH HERTZ ANTENNAS	0	0	0	0	0	0	
0 930 03-17 DO YOU WORK WITH MARCONI ANTENNAS	0	0	0	0	0	0	
0 931 03-18 DO YOU WORK WITH BROADSIDE ARRAYS	0	2	1	2	0	0	
0 932 03-19 DO YOU WORK WITH END-FIRE ARRAYS	0	0	2	1	2	0	
0 933 03-20 DO YOU WORK WITH CARROTIN ARRAYS	0	0	0	0	0	0	
0 934 03-21 DO YOU WORK WITH COLLINEAR ARRAYS	4	1	2	0	0	0	
0 935 03-22 DO YOU USE OR REFER TO THE TERM ELECTROMAGNETIC INDUCTION FIELDS WHEN WORKING WITH ANTENNAS	0	0	0	0	0	3	
0 936 03-23 DO YOU MEASURE ELECTROMAGNETIC INDUCTION FIELDS OF ANTENNAS	0	0	0	0	0	0	
0 937 03-24 DO YOU USE OR REFER TO THE TERM ELECTROMAGNETIC RADIATION FIELDS WHEN WORKING WITH ANTENNAS	0	0	0	2	0	0	
0 938 03-25 DO YOU MEASURE ELECTROMAGNETIC RADIATION FIELDS OF ANTENNAS	0	0	0	0	0	3	
0 939 03-26 DO YOU USE OR REFER TO THE TIME PHASE OF ELECTRIC (E) AND MAGNETIC (H) COMPONENTS IN ANTENNA RADIATION	0	0	0	0	0	0	
0 940 03-27 DO YOU USE OR REFER TO THE TIME PHASE OF ELECTRIC (E) AND MAGNETIC (H) COMPONENTS IN ANTENNA INDUCTION FIELD	0	0	0	0	0	0	
0 941 03-28 ARE ANY OF THE ANTENNAS YOU WORK ON LINEARLY POLARIZED	5	7	6	0	0	6	
0 942 03-29 ARE ANY OF THE ANTENNAS YOU WORK ON CIRCULARLY POLARIZED	5	5	2	0	0	6	
0 943 03-30 DO YOU MEASURE AND DETERMINE THE POLARITY OF ANTENNAS YOU WORK ON	1	1	2	0	0	0	
0 944 03-31 DO YOU CONSTRUCT, OR MAKE THE CALCULATIONS NECESSARY TO CONSTRUCT, ANTENNAS OF CORRECT LENGTH FOR	?	0	1	0	0	0	

TASK ANALYSIS SUMMARY
PREDICTED ELEMENTS PERFORMANCE

ITEM	SPL 005	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
P 945 U3-32 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS	0	0	1	0	0	0
P 946 U3-33 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS SERVING AS DIRECTORS	0	0	1	0	0	0
P 947 U3-34 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS SERVING AS REFLECTORS	0	0	1	0	0	0
P 948 U3-35 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN DONT REMEMBER WHAT KIND OF ELEMENTS	14	10	11	5	0	0
P 949 U3-36 DO YOU WORK ON UNIDIRECTIONAL ANTENNAS	5	3	7	0	4	6
P 950 U3-37 DO YOU WORK ON BIDIRECTIONAL ANTENNAS	5	3	3	0	0	3
P 951 U3-38 DO YOU WORK ON DONT REMEMBER THE DIRECTIONALITY	18	12	14	9	0	9
P 952 U3-39 DO YOU WORK WITH ROTATOR ANTENNA ARRAYS	0	1	1	2	0	0
P 953 PI-01 IN YOUR PRESENT JOB DO YOU WORK WITH TRANSMISSION LINES (TRANSMISSION LINES ARE DEFINED TO INCLUDE LEADS	0	5	5	2	7	0
P 954 PI-02 DO YOU REFER TO OR USE COPPER LOSS OR IZR LOSS IN TRANSMISSION LINES	0	0	0	0	0	0
P 955 PI-03 DO YOU REFER TO OR USE SKIN EFFECTS OF HIGH FREQUENCY CURRENTS IN TRANSMISSION LINES	0	0	0	0	0	0
P 956 PI-04 DO YOU REFER TO OR USE RADIATION LOSS IN TRANSMISSION LINES	0	0	0	0	0	0
P 957 PI-05 DO YOU USE OR REFER TO DIELECTRIC LOSS IN TRANSMISSION LINES	0	0	0	0	0	0
P 958 PI-06 DO YOU USE OR REFER TO LEAKAGE LOSSES IN TRANSMISSION LINES	0	0	0	0	0	0
P 959 PI-07 DO YOU WORK WITH TWISTED PAIR TRANSMISSION LINES	2	0	1	0	4	0
P 960 PI-08 DO YOU WORK WITH TWIN LEAD TRANSMISSION LINES	2	0	1	0	4	0
P 961 PI-09 DO YOU WORK WITH OPEN TWO-WIRE TRANSMISSION LINES	2	2	2	0	4	0
P 962 PI-10 DO YOU WORK WITH FLEXIBLE COAXIAL CABLE TRANSMISSION LINES	2	5	3	0	7	0
P 963 PI-11 DO YOU WORK WITH RIGID COAXIAL CABLE TRANSMISSION LINES	2	1	1	0	0	0
P 964 PI-12 DO YOU TROUBLESHOOT TRANSMISSION LINES	2	2	2	0	4	0
P 965 PI-13 DO YOU ANALYZE VOLTAGE OR CURRENT WAVEFORMS IN TRANSMISSION LINES TO DETERMINE THE TYPE OF TERMINATION	2	0	1	0	0	0
P 966 PI-14 DO YOU SELECT APPROPRIATE TRANSMISSION LINES TERMINATIONS TO ACHIEVE DESIRED WAVEFORMS	0	0	0	0	0	0
P 967 PI-15 DO YOU USE OR REFER TO SCHEMATIC SYMBOLS FOR LINE TERMINATIONS IN TERMS OF CIRCUIT TERMINATIONS	0	0	0	0	4	0
P 968 PI-16 DO YOU MEASURE STANDING WAVE RATIOS (SWR) OF TRANSMISSION LINES	0	0	0	0	0	0
P 969 PI-17 DO YOU CALCULATE STANDING WAVE RATIOS (SWR) OF TRANSMISSION LINES	0	0	0	0	0	0
P 970 PI-18 DO YOU PERFORM THE CALCULATIONS NECESSARY TO DETERMINE THE IMPEDANCE AND LENGTH OF QUARTER - WAVELENGTH	0	0	0	0	0	0

3 945 U3-32 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS SERVING AS DIRECTORS, YOU WORK WITH CONTAIN PARASITIC ELEMENTS SERVING AS REFLECTORS

0 946 U3-33 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS SERVING AS DIRECTORS

0 947 U3-34 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS SERVING AS REFLECTORS

0 948 U3-35 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN DONT REMEMBER WHAT KIND OF ELEMENTS

0 949 U3-36 DO YOU WORK ON UNIDIRECTIONAL ANTENNAS

0 950 U3-37 DO YOU WORK ON BIDIRECTIONAL ANTENNAS

0 951 U3-38 DO YOU WORK ON DONT REMEMBER THE DIRECTIONALITY

0 952 U3-39 DO YOU WORK WITH ROTATOR ANTENNA ARRAYS

P 953 PI-01 IN YOUR PRESENT JOB DO YOU WORK WITH TRANSMISSION LINES (TRANSMISSION LINES ARE DEFINED TO INCLUDE LEADS

P 954 PI-02 DO YOU REFER TO OR USE COPPER LOSS OR IZR LOSS IN TRANSMISSION LINES

P 955 PI-03 DO YOU REFER TO OR USE SKIN EFFECTS OF HIGH FREQUENCY CURRENTS IN TRANSMISSION LINES

P 956 PI-04 DO YOU REFER TO OR USE RADIATION LOSS IN TRANSMISSION LINES

P 957 PI-05 DO YOU USE OR REFER TO DIELECTRIC LOSS IN TRANSMISSION LINES

P 958 PI-06 DO YOU USE OR REFER TO LEAKAGE LOSSES IN TRANSMISSION LINES

P 959 PI-07 DO YOU WORK WITH TWISTED PAIR TRANSMISSION LINES

P 960 PI-08 DO YOU WORK WITH TWIN LEAD TRANSMISSION LINES

P 961 PI-09 DO YOU WORK WITH OPEN TWO-WIRE TRANSMISSION LINES

P 962 PI-10 DO YOU WORK WITH FLEXIBLE COAXIAL CABLE TRANSMISSION LINES

P 963 PI-11 DO YOU WORK WITH RIGID COAXIAL CABLE TRANSMISSION LINES

P 964 PI-12 DO YOU TROUBLESHOOT TRANSMISSION LINES

P 965 PI-13 DO YOU ANALYZE VOLTAGE OR CURRENT WAVEFORMS IN TRANSMISSION LINES TO DETERMINE THE TYPE OF TERMINATION

P 966 PI-14 DO YOU SELECT APPROPRIATE TRANSMISSION LINES TERMINATIONS TO ACHIEVE DESIRED WAVEFORMS

P 967 PI-15 DO YOU USE OR REFER TO SCHEMATIC SYMBOLS FOR LINE TERMINATIONS IN TERMS OF CIRCUIT TERMINATIONS

P 968 PI-16 DO YOU MEASURE STANDING WAVE RATIOS (SWR) OF TRANSMISSION LINES

P 969 PI-17 DO YOU CALCULATE STANDING WAVE RATIOS (SWR) OF TRANSMISSION LINES

P 970 PI-18 DO YOU PERFORM THE CALCULATIONS NECESSARY TO DETERMINE THE IMPEDANCE AND LENGTH OF QUARTER - WAVELENGTH

PCT MHS PERFORMING BY ARMS GROUPS
 TASK GROUP SUMMARY
 PERCENT MEMBERS PERFORMING

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AF HUMAN RESOURCES LABORATORY
 AIR FORCE SYSTEMS COMMAND

ARMED FORCES	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
P 471 PI-19 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED P 472 PI-20 DO YOU WORK WITH TRANSFORMERS P 473 PI-21 DO YOU SELECT THE TYPE OF TRANSMISSION LINE NEEDED FOR PARTICULAR JOBS WITHOUT REFERRING TO TECHNICAL DATA P 474 PI-22 DO YOU USE OR REFER TO THE TERM CHARACTERISTIC IMPEDANCE (Z0) OF TRANSMISSION LINES P 475 PI-23 DO YOU CALCULATE THE CHARACTERISTIC IMPEDANCE (Z0) OF TRANSMISSION LINES P 476 PI-24 DO YOU USE OR REFER TO THE TERM CUTOFF FREQUENCY OF TRANSMISSION LINES P 477 PI-25 DO YOU USE OR REFER TO THE TERM VELOCITY FACTOR (K) OF TRANSMISSION LINES	0	1	1	0	0	0
P 478 PI-26 DO YOU COMPUTE THE ELECTRICAL LENGTH OF TRANSMISSION LINES FOR PARTICULAR FREQUENCIES P 479 PI-27 DO YOU CONSTRUCT TRANSMISSION LINES OF PARTICULAR ELECTRICAL LENGTH FOR GIVEN FREQUENCIES P 480 PI-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT AS THE FREQUENCY INCREASES AND THE PHYSICAL LENGTH OF P 481 PI-29 DO YOU WORK WITH NONRESONANT (FLAT) TRANSMISSION LINES	0	0	0	0	0	0
P 482 PI-30 DO YOU WORK WITH RESONANT TRANSMISSION LINES P 483 PI-31 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING STUB MATCHING P 484 P2-01 DO YOU WORK WITH WAVEGUIDES OR CAVITY RESONATORS IN YOUR PRESENT JOB	0	0	0	0	0	0
P 485 P2-02 DO YOU INSPECT WAVEGUIDES OR CAVITY RESONATORS P 486 P2-03 DO YOU CLEAN WAVEGUIDES OR CAVITY RESONATORS P 487 P2-04 DO YOU BEND WAVEGUIDES OR CAVITY RESONATORS P 488 P2-05 DO YOU TWIST WAVEGUIDES OR CAVITY RESONATORS P 489 P2-06 DO YOU PRESSURIZE WAVEGUIDES OR CAVITY RESONATORS P 490 P2-07 DO YOU PURGE WAVEGUIDES OR CAVITY RESONATORS P 491 P2-08 DO YOU TROUBLESHOOT WAVEGUIDES OR CAVITY RESONATORS P 492 P2-09 DO YOU REMOVE OR INSTALL COMPLETE WAVEGUIDES P 493 P2-10 DO YOU REMOVE OR INSTALL WAVEGUIDE SECTIONS P 494 P2-11 DO YOU REMOVE OR INSTALL DUMMY LOADS P 495 P2-12 DO YOU REMOVE OR INSTALL E BENDS P 496 P2-13 DO YOU REMOVE OR INSTALL H BENDS P 497 P2-14 DO YOU REMOVE OR INSTALL OTHER BENDS P 498 P2-15 DO YOU REMOVE OR INSTALL SHOCK JOINTS P 499 P2-16 DO YOU REMOVE OR INSTALL ROTATING JOINTS P100 P2-17 DO YOU REMOVE OR INSTALL DIRECTIONAL COUPLERS P101 P2-18 DO YOU REMOVE OR INSTALL BI-DIRECTIONAL COUPLERS P102 P2-19 DO YOU USE OR REFER TO "A" WALL OF WAVEGUIDES	23	30	27	16	25	14

TASK GROUP SUMMARY
PERCENT NUMBER PERFORMING

DRAFT

	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
P1003 P2-24 DO YOU USE OR REFER TO "A" WALL OF WAVEGUIDES	0	0	0	0	0	0
P1004 P2-21 DO YOU USE OR REFER TO CUT-OFF FREQUENCY OF WAVEGUIDES	2	0	1	0	4	0
P1005 P2-22 DO YOU USE OR REFER TO FREQUENCY-DETERMINING WALL OF	0	0	0	0	0	0
P1006 P2-23 DO YOU USE OR REFER TO POWER-DETERMINING WALL OF	0	1	1	0	0	0
P1007 P2-24 DO YOU USE OR REFER TO ELECTRIC FIELD BOUNDARY	0	0	0	0	0	0
P1008 P2-25 DO YOU USE OR REFER TO MAGNETIC FIELD BOUNDARY	0	0	0	0	0	0
P1009 P2-26 DO YOU USE OR REFER TO DUPLEXEN FIELD BOUNDARY	0	0	0	0	0	0
P1010 P2-27 DO YOU USE OR REFER TO THE GENERAL RULE THAT MOST	0	0	0	0	0	0
WAVEGUIDES ARE MADE WITH A "B" WALL SIZE OF .7 WAVELENGTHS						
P1011 P2-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT MOST "A"	0	0	0	0	0	0
WALLS RANGE FROM .2 TO .5 WAVELENGTHS IN SIZE, WITH .35						
P1012 P2-29 ARE YOU CONCERNED WITH THE MATERIAL (SUCH AS BRASS)	0	2	1	0	4	0
WHICH WAVEGUIDES ARE MADE OF						
P1013 P2-30 DO YOU COMPUTE THE LENGTHS OF A WAVEGUIDE FOR SPECIFIC	0	0	0	0	0	0
INSTALLATION						
P1014 P2-31 DO YOU USE THE RIGHT HAND RULE TO DETERMINE THE	0	0	0	0	0	0
DIRECTION OF PROPAGATION, DIRECTION OF "E" FIELD, OR						
P1015 P2-32 DO YOU USE OR REFER TO THE TIME PHASE OF PEAK "E" OR	0	0	0	0	0	0
"H" LINES IN WAVEGUIDES						
P1016 P2-33 DO YOU MEASURE THE TIME PHASE OF "E" OR "H" LINES IN	0	0	0	0	0	0
WAVEGUIDES						
P1017 P2-34 DO YOU USE OR REFER TO THE SPACE QUADRATURE OF "E" OR	0	0	0	0	0	0
"H" LINES IN WAVEGUIDES						
P1018 P2-35 ARE HIGH POWER PROBES USED ON WAVEGUIDES OR CAVITY	0	0	0	0	0	0
RESONATORS YOU WORK WITH						
P1019 P2-36 ARE LOW POWER PROBES USED ON WAVEGUIDES OR CAVITY	0	1	1	0	0	0
RESONATORS YOU WORK WITH						
P1020 P2-37 ARE LOOPS USED ON WAVEGUIDES OR CAVITY RESONATORS	0	1	1	0	0	0
YOU WORK WITH						
P1021 P2-38 ARE APERTURES (WINDOMS OR IRISSES) USED ON WAVEGUIDES	13	9	10	9	11	3
ON CAVITY RESONATORS YOU WORK WITH						
P1022 P2-39 ARE DON'T REMEMBER THE KIND OF ENERGY COUPLING USED	5	4	4	2	11	9
ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH						
P1023 P2-40 DO YOU DETERMINE WHERE PROBES SHOULD BE MOUNTED IN	0	0	0	0	0	0
WAVEGUIDES OR CAVITY RESONATORS WITHOUT REFERRING TO						
P1024 P2-41 DO YOU DETERMINE THE POSITIONING OF LOOPS IN	0	0	0	0	0	0
WAVEGUIDES OR CAVITY RESONATORS WITHOUT REFERRING TO						

PCT HUMAN PERF TASKS BY AFHS UNITS
NASA - JSC SUMMARY
PERCENT MEMBERS PERFORMING

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AF HUMAN RESOURCES LABORATORY
AF AIR FORCE SYSTEMS COMMAND

BY-TSK	SPL					
	006	007	008	009	010	011
P1025 P2-42 DO YOU DETERMINE THE POSITIONING OR SIZE OF APERTURES IN WAVEGUIDES OR CAVITY RESONATORS WITHOUT REFERRING TO	0	0	0	0	0	0
P1026 P2-43 ARE CHOKE JOINTS USED IN WAVEGUIDES OR CAVITY	0	0	0	2	0	3
RESONATORS YOU WORK WITH						
P1027 P2-44 ARE ROTATING JOINTS USED IN WAVEGUIDES OR CAVITY	0	0	0	2	0	0
RESONATORS YOU WORK WITH						
P1028 P2-45 ARE DON'T REMEMBER THE KIND OF JOINTS USED IN WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH	4	10	8	2	7	9
P1029 P2-46 DO YOU TUNE CAVITY RESONATORS USING CAPACITIVE TUNING	0	0	0	2	4	0
P1030 P2-47 DO YOU TUNE CAVITY RESONATORS USING INDUCTIVE TUNING	0	0	0	0	4	3
P1031 P2-48 DO YOU TUNE CAVITY RESONATORS USING VOLUME TUNING	0	2	1	0	4	0
P1032 P2-49 DO YOU TUNE CAVITY RESONATORS USING DON'T REMEMBER THE METHOD OF TUNING	2	5	4	0	0	6
P1033 P2-50 DO YOU MEASURE THE FREQUENCY OF SIGNALS IN CAVITY RESONATORS	0	2	1	0	0	3
P1034 P3-01 IN YOUR PRESENT JOB DO YOU WORK WITH KLYSTRONS, TRAVELLING WAVE TUBES (TWT), PARAMETRIC AMPLIFIERS, OR	4	7	6	0	7	3
P1035 P3-02 DO YOU USE OR REFER TO INTERELECTRODE CAPACITANCE	0	1	1	0	0	3
P1036 P3-03 DO YOU USE OR REFER TO ELECTRON TRANSIT TIME	0	1	1	0	0	0
P1037 P3-04 DO YOU USE OR REFER TO LEAD INDUCTANCE	0	1	1	0	0	0
P1038 P3-05 DO YOU USE OR REFER TO RF LOSSES IN EXTERNAL CIRCUITRY	0	3	2	0	0	3
P1039 P3-06 DO YOU USE OR REFER TO PRINCIPLE OF ELECTRON VELOCITY MODULATION	0	0	0	0	0	0
P1040 P3-07 DO YOU USE OR REFER TO ELECTRON BUNCHING	0	0	0	0	0	0
P1041 P3-08 DO YOU WORK WITH TWO-CAVITY KLYSTRONS	0	1	1	0	0	0
P1042 P3-09 DO YOU WORK WITH THREE-CAVITY KLYSTRONS	0	2	1	0	0	0
P1043 P3-10 DO YOU WORK WITH REFLEX KLYSTRONS	0	2	2	0	4	3
P1044 P3-11 DO YOU WORK WITH TRAVELING-WAVE TUBES (TWT)	0	2	0	1	0	0
P1045 P3-12 DO YOU WORK WITH NONDEGENERATIVE PARAMETRIC AMPLIFIERS	0	0	0	0	0	0
P1046 P3-13 DO YOU WORK WITH UP-CONVERTER PARAMETRIC AMPLIFIERS	0	0	0	0	0	0
P1047 P3-14 DO YOU WORK WITH MAGNETRONS	0	0	0	0	0	0
P1048 P3-15 DO YOU INSPECT KLYSTRONS OR TWT	0	1	2	0	0	3
P1049 P3-16 DO YOU CLEAN KLYSTRONS OR TWT	2	0	1	0	0	0
P1050 P3-17 DO YOU TUNE KLYSTRONS OR TWT ELECTRICALLY	2	3	2	0	0	0
P1051 P3-18 DO YOU TUNE KLYSTRONS OR TWT MECHANICALLY	2	4	3	0	0	0
P1052 P3-19 DO YOU PERFORM OPERATIONAL CHECKS OF KLYSTRONS OR TWT	4	2	2	0	0	0
P1053 P3-20 DO YOU TROUBLESHOOT KLYSTRONS OR TWT	0	0	0	0	0	0
P1054 P3-21 DO YOU REMOVE OR REPLACE COMPLETE KLYSTRON OR TWT	2	1	1	0	0	0
P1055 P3-22 DO YOU REMOVE OR REPLACE KLYSTRON OR TWT COMPONENTS	2	0	1	0	0	0
P1056 P3-23 DO YOU INSPECT PARAMETRIC AMPLIFIERS	0	0	0	0	0	0
P1057 P3-24 DO YOU CLEAN PARAMETRIC AMPLIFIERS	0	0	0	0	0	0
P1058 P3-25 DO YOU ADJUST PARAMETRIC AMPLIFIERS	0	0	0	0	0	0

PERCENT MEMBERS PERFORMING

DY-TSK	SPL 004	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
P1059 PJ-26 DO YOU TUNE PARAMETRIC AMPLIFIERS	0	0	0	0	0	0
P1060 PJ-27 DO YOU PERFORM OPERATIONAL CHECKS OF PARAMETRIC AMPLIFIERS	0	0	0	0	0	0
P1061 PJ-28 DO YOU TROUBLESHOOT PARAMETRIC AMPLIFIERS	0	0	0	0	0	0
P1062 PJ-29 DO YOU REMOVE OR REPLACE COMPLETE PARAMETRIC AMPLIFIER	0	0	0	0	0	0
P1063 PJ-30 DO YOU REMOVE OR REPLACE PARAMETRIC AMPLIFIER	0	0	0	0	0	0
P1064 PJ-31 DO YOU INSPECT MAGNETRONS	0	0	0	0	0	0
P1065 PJ-32 DO YOU CLEAN MAGNETRONS	0	0	0	0	0	0
P1066 PJ-33 DO YOU ADJUST MAGNETRONS	0	0	0	0	0	0
P1067 PJ-34 DO YOU TUNE MAGNETRONS	0	0	0	0	0	0
P1068 PJ-35 DO YOU PERFORM OPERATIONAL CHECKS OF MAGNETRONS	0	0	0	0	0	0
P1069 PJ-36 DO YOU TROUBLESHOOT MAGNETRONS	0	0	0	0	0	0
P1070 PJ-37 DO YOU REMOVE OR REPLACE COMPLETE MAGNETRON	0	0	0	0	0	0
P1071 PJ-38 DO YOU REMOVE OR REPLACE MAGNETRON COMPONENTS	0	0	0	0	0	0
P1072 PJ-39 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS	0	0	0	0	0	0
P1073 PJ-40 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRON CATCHER CAVITIES	0	0	0	0	0	0
P1074 PJ-41 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRON DRIFT SPACES	0	0	0	0	0	0
P1075 PJ-42 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRON FEEDBACK LOOPS	0	1	1	0	0	0
P1076 PJ-43 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRON LAUNCHER GRIDS	0	0	0	0	0	0
P1077 PJ-44 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRON CONTROL GRIDS	0	0	0	0	0	0
P1078 PJ-45 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRON RUNCHER CAVITIES	0	0	0	0	0	0
P1079 PJ-46 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRON CATHODES	0	0	0	0	0	0
P1080 PJ-47 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRON PATHODES	0	0	0	0	0	0
P1081 PJ-48 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON REFLYER (REFLECTOR) PLATES	0	1	1	0	4	3
P1082 PJ-49 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON GRIDS	0	1	1	0	4	3
P1083 PJ-50 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON GRID CAVITY GAPS	2	0	1	0	0	3
P1084 PJ-51 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON RESONANT CAVITIES	2	1	1	0	4	3
P1085 PJ-52 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON MAGNETIC COUPLING LOOPS	0	0	0	0	0	0
P1086 PJ-53 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON FILAMENTS	0	1	1	0	4	0
P1087 PJ-54 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON CATHODES	0	0	0	0	4	0

Dy-Tsk	SPL					
	006	007	008	009	010	011
P1088 P3-55 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON OUTPUT LEADS	2	0	1	0	4	3
P1089 P3-56 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES FILAMENTS	0	0	0	0	0	0
P1090 P3-57 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES CATHODES	0	0	0	0	0	0
P1091 P3-58 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES MODULATOR GRIDS	0	0	0	0	0	0
P1092 P3-59 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES ANODES	0	0	0	0	0	0
P1093 P3-60 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES HELIXES	0	0	0	0	0	0
P1094 P3-61 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES COLLECTORS	0	0	0	0	0	0
P1095 P3-62 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES MAGNETS	0	0	0	0	0	0
P1096 P3-63 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES ATTENUATORS	0	0	0	0	0	0
P1097 P3-64 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER FERRITE CIRCULATORS	0	0	0	0	0	0
P1098 P3-65 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER SIGNAL CAVITIES	0	0	0	0	0	0
P1099 P3-66 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER IDLER CAVITIES	0	0	0	0	0	0
P1100 P3-67 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER VARACTOR DIODES	0	0	0	0	0	0
P1101 P3-68 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER FERRITE ISOLATORS	0	0	0	0	0	0
P1102 P3-69 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER REVERSE- BIAS BATTERIES	0	0	0	0	0	0
P1103 P3-70 DO YOU PERFORM TASKS ON ANODES	0	0	0	0	0	0
P1104 P3-71 DO YOU PERFORM TASKS ON ANODE COOLING PINS	0	0	0	0	0	0
P1105 P3-72 DO YOU PERFORM TASKS ON COUPLING LOOPS	0	0	0	0	0	0
P1106 P3-73 DO YOU PERFORM TASKS ON HEATER LEADS	0	0	0	0	0	0
P1107 P3-74 DO YOU PERFORM TASKS ON HEATER LEADS	0	0	0	0	0	0
P1108 P3-75 DO YOU PERFORM TASKS ON RESONANT CAVITIES	0	0	0	0	0	0
P1109 P3-76 DO YOU PERFORM TASKS ON CATHODES	0	0	0	0	0	0
P1110 Q1-01 DO YOU USE OR REFER TO STORAGE REGISTERS	0	0	0	0	0	0
Q1111 Q1-02 DO YOU USE OR REFER TO SHIFT REGISTERS	0	1	1	0	0	0
Q1112 Q1-03 DO YOU USE OR REFER TO LOGIC SYMBOLS OF SHIFT REGISTERS	0	0	0	0	0	0
Q1113 Q1-04 DO YOU USE OR REFER TO LOGIC SYMBOLS OF STORAGE REGISTERS	0	0	0	0	0	0
Q1114 Q1-05 DO YOU TRACE THE DATA FLOW THROUGH LOGIC DIAGRAMS OF SHIFT REGISTERS	0	2	1	0	0	0
Q1115 Q1-06 DO YOU TRACE THE DATA FLOW THROUGH LOGIC DIAGRAMS OF OTHER TYPE OF REGISTERS	0	1	1	0	0	0

PENTENT MEMBERS PERFORMING

DR-TSK	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
Q1110 Q1-07 DO YOU DETERMINE THE STATE OF EACH FLIP-FLOP OF A SHIFT REGISTER AFTER A SPECIFIED NUMBER OF SHIFT PULSES	0	5	3	0	0	0
Q1117 Q2-01 DO YOU WORK WITH DIGITAL COUNTERS, REGISTERS, OR STORAGE DEVICES IN YOUR PRESENT JOB	5	5	5	5	4	3
Q1118 Q2-02 DO YOU USE OR REFER TO DELAY LINES	0	0	0	0	0	0
Q1119 Q2-03 DO YOU USE OR REFER TO MAGNETIC CORES	0	0	0	0	0	0
Q1120 Q2-04 DO YOU USE OR REFER TO MAGNETIC DRUMS	0	0	0	0	0	0
Q1121 Q2-05 DO YOU USE OR REFER TO MAGNETIC TAPES	0	0	0	0	0	0
Q1122 Q2-06 DO YOU USE OR REFER TO ACCESS TIME OR SPEED OR MEMORY SYSTEMS	2	1	1	0	0	0
Q1123 Q2-07 DO YOU USE OR REFER TO WORD CAPACITY OF MEMORY SYSTEMS	0	0	0	0	0	0
Q1124 Q2-08 DO YOU USE OR REFER TO VOLATILITY OF MEMORY SYSTEMS	0	0	0	0	0	0
Q1125 Q2-09 DO YOU USE OR REFER TO LOGIC SYMBOL OF DELAY LINES	0	0	0	0	0	0
Q1126 Q3-01 IN YOUR PRESENT JOB, DO YOU WORK WITH DIGITAL-TO-ANALOG (D/A) CONVERTERS, ANALOG-TO-DIGITAL (A/D)	0	0	0	0	0	0
Q1127 Q3-02 DO YOU COMPUTE OUTPUT VOLTTAGES FOR ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A) CONVERTERS FOR GIVEN INPUT COUNT IN ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A)	0	0	0	0	0	0
Q1128 Q3-03 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE COUNT IN ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A)	0	0	0	0	0	0
Q1129 Q3-04 DO YOU COMPUTE ANALOG VOLTTAGES FOR GIVEN BINARY COUNTS IN ELECTRONIC DIGITAL-TO-ANALOG (D/A) CONVERTERS	0	0	0	0	0	0
Q1130 Q3-05 DO YOU PERFORM SAMPLE FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS	0	0	0	0	0	0
Q1131 Q3-06 DO YOU PERFORM HOLD FUNCTION TASKS ON VARIABLE ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS	0	0	0	0	0	0
Q1132 Q3-07 DO YOU PERFORM COMPARE FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS	0	0	0	0	0	0
Q1133 Q3-08 DO YOU PERFORM DIGITIZE FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS	0	0	0	0	0	0
Q1134 Q3-09 DO YOU PERFORM DON'T REMEMBER WHICH FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER	0	0	0	0	0	3
Q1135 Q3-10 DO YOU USE OR REFER TO SAMPLE FUNCTION OF A/D CONVERTERS	0	0	0	0	0	0
Q1136 Q3-11 DO YOU USE OR REFER TO HOLD FUNCTION OF A/D CONVERTERS	0	0	0	0	0	0
Q1137 Q3-12 DO YOU USE OR REFER TO COMPARE FUNCTION OF A/D CONVERTERS	0	0	0	0	0	0
Q1138 Q3-13 DO YOU USE OR REFER TO DIGITAL FUNCTION OF A/D CONVERTERS	0	0	0	0	0	0
Q1139 Q3-14 DO YOU PERFORM ANY TASKS ON MECHANICAL ANALOG-TO-DIGITAL (A/D) CONVERTERS	0	0	0	0	0	0

Q1110 Q1-07 DO YOU DETERMINE THE STATE OF EACH FLIP-FLOP OF A SHIFT REGISTER AFTER A SPECIFIED NUMBER OF SHIFT PULSES

Q1117 Q2-01 DO YOU WORK WITH DIGITAL COUNTERS, REGISTERS, OR STORAGE DEVICES IN YOUR PRESENT JOB

Q1118 Q2-02 DO YOU USE OR REFER TO DELAY LINES

Q1119 Q2-03 DO YOU USE OR REFER TO MAGNETIC CORES

Q1120 Q2-04 DO YOU USE OR REFER TO MAGNETIC DRUMS

Q1121 Q2-05 DO YOU USE OR REFER TO MAGNETIC TAPES

Q1122 Q2-06 DO YOU USE OR REFER TO ACCESS TIME OR SPEED OR MEMORY SYSTEMS

Q1123 Q2-07 DO YOU USE OR REFER TO WORD CAPACITY OF MEMORY SYSTEMS

Q1124 Q2-08 DO YOU USE OR REFER TO VOLATILITY OF MEMORY SYSTEMS

Q1125 Q2-09 DO YOU USE OR REFER TO LOGIC SYMBOL OF DELAY LINES

Q1126 Q3-01 IN YOUR PRESENT JOB, DO YOU WORK WITH DIGITAL-TO-ANALOG (D/A) CONVERTERS, ANALOG-TO-DIGITAL (A/D)

Q1127 Q3-02 DO YOU COMPUTE OUTPUT VOLTTAGES FOR ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A) CONVERTERS FOR GIVEN INPUT COUNT IN ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A)

Q1128 Q3-03 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE COUNT IN ELECTROMECHANICAL DIGITAL-TO-ANALOG (D/A)

Q1129 Q3-04 DO YOU COMPUTE ANALOG VOLTTAGES FOR GIVEN BINARY COUNTS IN ELECTRONIC DIGITAL-TO-ANALOG (D/A) CONVERTERS

Q1130 Q3-05 DO YOU PERFORM SAMPLE FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS

Q1131 Q3-06 DO YOU PERFORM HOLD FUNCTION TASKS ON VARIABLE ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS

Q1132 Q3-07 DO YOU PERFORM COMPARE FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS

Q1133 Q3-08 DO YOU PERFORM DIGITIZE FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER CIRCUITS

Q1134 Q3-09 DO YOU PERFORM DON'T REMEMBER WHICH FUNCTION TASKS ON VARIABLE TIME ANALOG-TO-DIGITAL (A/D) CONVERTER

Q1135 Q3-10 DO YOU USE OR REFER TO SAMPLE FUNCTION OF A/D CONVERTERS

Q1136 Q3-11 DO YOU USE OR REFER TO HOLD FUNCTION OF A/D CONVERTERS

Q1137 Q3-12 DO YOU USE OR REFER TO COMPARE FUNCTION OF A/D CONVERTERS

Q1138 Q3-13 DO YOU USE OR REFER TO DIGITAL FUNCTION OF A/D CONVERTERS

Q1139 Q3-14 DO YOU PERFORM ANY TASKS ON MECHANICAL ANALOG-TO-DIGITAL (A/D) CONVERTERS

AD-A047 546 AIR FORCE OCCUPATIONAL MEASUREMENT CENTER LACKLAND A--ETC F/G 5/9
ELECTRONICS PRINCIPLES OVERSEAS SUPPLEMENT TO THE MISSILE MAINT--ETC(U)
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CONT.

CATEGORICAL TASKS	CATEGORICAL TASKS	SPL					
		0.06	0.07	0.08	0.09	0.10	0.11
R1140 R1-01 DO YOU WORK WITH PHANTASTRON CIRCUITRY IN YOUR PRESENT JOB		0	1	1	0	0	0
R1141 R2-01 IN YOUR PRESENT JOB DO YOU WORK WITH SCHMITT TRIGGER CIRCUITS		0	0	0	0	0	0
R1142 R2-02 DO YOU TRACE DATA FLOW THROUGH SCHMITT TRIGGER SCHEMATIC DIAGRAMS		0	0	0	0	0	0
R1143 R2-03 DO YOU USE OR REFER TO SCHMITT TRIGGER LOGIC SYMBOLS		0	0	0	0	0	0
R1144 R3-01 IN YOUR PRESENT JOB DO YOU FABRICATE MULTICONDUCTOR CABLES		4	7	6	7	7	9
R1145 R3-02 DO YOU FABRICATE COAXIAL CABLES		11	15	14	14	21	23
S1146 S1-01 IN YOUR PRESENT JOB DO YOU PERFORM ANY TASKS ON VISUAL READOUT SYSTEMS		18	15	16	11	4	6
S1147 S1-02 DO YOU PERFORM ANY TASKS ON NIXIE LIGHTS OR NIXIE LIGHT DECODER SYSTEMS		4	1	2	2	0	3
S1148 S1-03 DO YOU ANALYZE NIXIE LIGHT DECODER SYSTEMS USING BOOLEAN ALGEBRA		0	0	0	0	0	0
S1149 S2-01 DO YOU WORK WITH PHOTO TUBES IN YOUR PRESENT JOB		2	1	1	5	4	3
S1150 S3-01 IN YOUR PRESENT JOB DO YOU WORK WITH CHOPPER CIRCUITS		0	0	2	0	0	0
S1151 S3-02 DO YOU MEASURE EXCITATION FREQUENCIES		0	0	0	0	0	0
S1152 S3-03 DO YOU MEASURE VOLTAGE-CURRENT PHASE RELATIONSHIPS		0	0	0	0	0	0
S1153 S3-04 DO YOU USE OR REFER TO EXCITATION FREQUENCIES		0	0	0	0	0	0
S1154 S3-05 DO YOU USE OR REFER TO VOLTAGE-CURRENT PHASE RELATIONSHIPS		0	0	0	0	0	0
S1155 S3-06 DO YOU USE SERVOS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION		0	0	0	2	0	0
S1156 S3-07 DO YOU USE DETECTORS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION		0	0	0	2	0	0
S1157 S3-08 DO YOU USE ERROR SIGNAL DEVICES IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION		0	0	2	0	0	0
S1158 S3-09 DO YOU USE COMPARISON CIRCUITS IN CONJUNCTION WITH CHOPPER CIRCUIT OPERATION		0	0	0	2	0	0
T1159 T1-01 DOES YOUR PRESENT JOB INVOLVE ANY TASKS DEALING WITH INFRARED SYSTEMS		43	44	43	25	39	40
T1160 T1-02 DO YOU INSPECT INFRARED SYSTEMS		36	40	37	14	32	34
T1161 T1-03 DO YOU CLEAN INFRARED SYSTEMS		34	32	31	14	25	31
T1162 T1-04 DO YOU ADJUST OR CALIBRATE INFRARED SYSTEMS		23	22	22	9	25	11
T1163 T1-05 DO YOU OPERATE INFRARED SYSTEMS		25	35	31	11	36	17
T1164 T1-06 DO YOU TROUBLESHOOT WIRE CONNECTIONS OF INFRARED SYSTEMS		9	12	10	7	18	6
T1165 T1-07 DO YOU TROUBLESHOOT MAJOR ASSEMBLIES OF INFRARED SYSTEMS		9	17	14	9	21	17
T1166 T1-08 DO YOU TROUBLESHOOT DOWN TO INFRARED SYSTEM COMPONENT PARTS		5	5	5	7	3	3
T1167 T1-09 DO YOU REMOVE OR REPLACE MAJOR ASSEMBLIES OF INFRARED SYSTEMS		18	14	15	9	25	20
T1168 T1-10 DO YOU REMOVE OR REPLACE INFRARED SYSTEM COMPONENT PARTS		5	4	4	5	7	3

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

DYS-1A

	SPL 006	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
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T1169 T1-11 DO YOU USE OR REFER TO FAR REGION	2	1	1	0	4	0
T1170 T1-12 DO YOU USE OR REFER TO INTERMEDIATE REGION	2	1	0	4	0	0
T1171 T1-13 DO YOU USE OR REFER TO NEAR REGION	4	1	2	0	4	0
T1172 T1-14 DO YOU USE OR REFER TO MICRON	2	1	1	0	4	0
T1173 T1-15 DO YOU USE OR REFER TO GRAY BODIES	2	0	1	0	4	0
T1174 T1-16 DO YOU USE OR REFER TO BLACK BODIES	2	1	1	0	7	6
T1175 T1-17 DO YOU USE OR REFER TO ABSORPTION	2	1	2	0	7	0
T1176 T1-18 DO YOU USE OR REFER TO SCATTERING	2	1	2	0	4	0
T1177 T1-19 DO YOU USE OR REFER TO ABSOLUTE ZERO	0	1	1	0	0	0
T1178 T1-20 DO YOU PERFORM TASKS ON SLITZ	0	0	0	0	0	0
T1179 T1-21 DO YOU PERFORM TASKS ON TARGET BUTTONS	0	0	0	0	4	0
T1180 T1-22 DO YOU PERFORM TASKS ON FERCTOR LENSES	0	0	0	0	4	0
T1181 T1-23 DO YOU PERFORM TASKS ON OCULAR LENSES	0	3	2	0	4	0
T1182 T1-24 DO YOU PERFORM TASKS ON CORRECTION LENSES	0	1	1	0	4	0
T1183 T1-25 DO YOU PERFORM TASKS ON FILTERS	2	1	1	0	4	3
T1184 T1-26 DO YOU PERFORM TASKS ON SPHERICAL MIRRORS	2	2	2	2	7	3
T1185 T1-27 DO YOU PERFORM TASKS ON PLANE MIRRORS	0	1	1	2	7	3
T1186 T1-28 DO YOU PRESENT JOB INVOLVE ANY TASKS DEALING WITH LASERS	32	33	31	25	11	26
T1187 T2-02 DO YOU INSPECT LASER SYSTEMS	25	31	28	18	11	26
T1188 T2-03 DO YOU CLEAN LASER SYSTEMS	25	25	24	14	4	14
T1189 T2-04 DO YOU OPERATE LASER SYSTEMS	20	25	23	9	7	14
T1190 T2-05 DO YOU OPERATE LASER SYSTEMS	18	25	22	9	7	14
T1191 T2-06 DO YOU TROUBLESHOOT WIRE CONNECTIONS OF LASER SYSTEMS	7	7	7	2	0	6
T1192 T2-07 DO YOU TROUBLESHOOT MAJOR ASSEMBLIES OF LASER SYSTEMS	7	16	13	10	4	20
T1193 T2-08 DO YOU TROUBLESHOOT TO COMPONENT PARTS OF LASER SYSTEMS	9	10	9	11	0	6
T1194 T2-09 DO YOU REMOVE OR REPLACE MAJOR ASSEMBLIES OF LASER SYSTEMS	16	11	12	14	7	20
T1195 T2-10 DO YOU REMOVE OR REPLACE COMPONENT PARTS OF LASER SYSTEMS	5	5	5	5	0	9
T1196 T2-11 DO YOU USE OR REFER TO ANGSTROMS (A)	0	1	1	0	0	0
T1197 T2-12 DO YOU USE OR REFER TO ELECTRON ENERGY LEVELS	0	1	1	0	0	0
T1198 T2-13 DO YOU USE OR REFER TO GROUND STATE	0	1	1	0	0	0
T1199 T2-14 DO YOU USE OR REFER TO EXCITED STATE	0	1	1	0	0	0
T1200 T2-15 DO YOU USE OR REFER TO PACKET OF RADIATION	0	1	1	0	0	0
T1201 T2-16 DO YOU USE OR REFER TO PHOTONS	0	1	1	0	0	0
T1202 T2-17 DO YOU USE OR REFER TO SPONTANEOUS EMISSION	0	1	1	0	0	0
T1203 T2-18 DO YOU USE OR REFER TO STIMULATED EMISSION	0	1	1	0	0	0
T1204 T2-19 DO YOU USE OR REFER TO COHERENCE OR INCOHERENCE	0	1	1	0	0	0
T1205 T2-20 DO YOU USE OR REFER TO INVERSION LEVEL	0	1	1	0	0	0
T1206 T2-21 DO YOU USE OR REFER TO MONOCHROMATIC	0	0	0	0	0	0
T1207 T2-22 DO YOU WORK WITH ACTIVE MATERIALS	0	0	0	0	0	0
T1208 T2-23 DO YOU WORK WITH PUMPING SOURCES	2	0	1	0	0	3
T1209 T2-24 DO YOU WORK WITH FULL SILVERED (100% REFLECTIVE) MIRRORS	0	0	0	0	0	0

TASK GROUP SUMMARY
PERCENT MEMBERS PERFORMING

QY-TSK	SPL 004	SPL 007	SPL 008	SPL 009	SPL 010	SPL 011
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U1249 U1-16 DO YOU PERFORM TASKS ON INPUT DEVICES	0	1	1	0	0	0
U1250 U1-17 DO YOU PERFORM TASKS ON STORAGE DEVICES	0	0	0	0	0	0
U1251 U1-18 DO YOU PERFORM TASKS ON ARITHMETIC SECTIONS	0	0	0	0	0	0
U1252 U1-19 DO YOU PERFORM TASKS ON CONTROL SECTIONS	2	0	1	0	0	0
U1253 U1-20 DO YOU PERFORM TASKS ON OUTPUT DEVICES	0	0	0	0	0	0
U1254 U1-21 DO YOU PERFORM TASKS ON POWER SUPPLIES	0	0	0	0	0	0
U1255 U2-01 DO YOU USE DECIBELS TO EXPRESS ATTENUATION AND	0	4	2	7	7	9
ATTENUATION						
U1256 U2-02 DO YOU USE LOGARITHMS TO COMPUTE OUTPUT POWER IN	0	0	0	0	4	0
DECIBELS						
U1257 U2-03 DO YOU USE LOGARITHMS TO COMPUTE ATTENUATION IN	0	0	0	0	4	0
DECIBELS						
U1258 U2-04 DUMMY TASK TO IDENTIFY INCUMENTS WHO PERFORMED	4	3	3	7	11	9
NO TASKS						

UNITED STATES AIR FORCE
JOB INVENTORYMISSILE SYSTEMS MAINTENANCE
AFSCS 31631L, 31651L, 31671L, 31693A MATHEMATICS, DIRECT CURRENT, VOLTAGE, AND
RESISTANCE

A 1 A1-01 IN YOUR PRESENT JOB, DO YOU USE INSTRUMENTS, SUCH AS
METERS OR OSCILLOSCOPES, IN WHICH IT IS NECESSARY TO
AMPLIFY OR ATTENUATE VOLTAGE, RESISTANCE, ETC., BY POWERS
OF 10.

A 2 A1-02 DO YOU USE PUBLICATIONS, SUCH AS A TECHNICAL ORDERS
OR MAINTENANCE MANUALS, IN WHICH IT IS NECESSARY FOR YOU
TO MULTIPLY OR DIVIDE BY A POWER OF 10 BEFORE YOU CAN
APPLY THE INFORMATION FROM THE PUBLICATION IN A USEFUL WAY
ON THE JOB.

A 3 A1-03 DO YOU REARRANGE AND SOLVE FORMULAS OR EQUATIONS.

A 4 A1-04 DO YOU CALCULATE THE SQUARE ROOT OF A QUANTITY.

A 5 A1-05 DO YOU SOLVE FOR UNKNOWN QUANTITIES.

A 6 A1-06 DO YOU CONVERT NUMBERS TO LOGARITHMS.

A 7 A1-07 DO YOU USE LOGARITHM TABLES IN ANY TYPE OF
CALCULATIONS.

A 8 A1-08 DO YOU SOLVE QUADRATIC EQUATIONS.

A 9 A1-09 DO YOU USE THE NATURAL SYSTEM OF LOGARITHMS.

A 10 A1-10 DO YOU PERFORM CALCULATIONS ON VECTOR QUANTITIES.

A 11 A1-11 DO YOU WORK WITH TRIGONOMETRIC FUNCTIONS SUCH AS
SINE, COSINE, OR TANGENT.

A 12 A1-12 DO YOU DETERMINE AREAS OF PLANE FIGURES.

A 13 A1-13 DO YOU SOLVE OR USE SIMULTANEOUS EQUATIONS.

A 14 A1-14 DO YOU SOLVE OR USE PROPORTIONS.

A 15 A2-01 DO YOU USE THE TERM VOLTAGE OR VOLT (V).

A 16 A2-02 DO YOU USE THE TERM ELECTROMOTIVE FORCE (EMF).

A 17 A2-03 DO YOU USE THE TERM OHM.

A 18 A2-04 DO YOU USE THE TERM ION.

A 19 A2-05 DO YOU USE THE TERM DYNE.

A 20 A2-06 DO YOU USE THE TERM AMPER.

A 21 A2-07 DO YOU USE THE TERM NEUTRON.

A 22 A2-08 DO YOU USE THE TERM COULOMB.

A 23 A2-09 DO YOU USE THE TERM PROTON.

A 24 A3-01 DO YOU WORK WITH RESISTORS IN YOUR PRESENT JOB.

A 25 A3-02 DO YOU INSPECT RESISTORS.

A 26 A3-03 DO YOU CLEAN RESISTORS.

A 27 A3-04 DO YOU ADJUST RESISTORS.

A 28 A3-05 DO YOU CHECK OHMIC VALUE OR RESISTORS.

A 29 A3-06 DO YOU REMOVE OR REPLACE RESISTORS.

A 30 A3-07 DO YOU USE OR REFER TO TEMPERATURE COEFFICIENTS FOR
RESISTORS ON ANY TASKS YOU PERFORM.

A 31 A3-08 DO YOU USE OR REFER TO RESISTOR SYMBOLS SUCH AS FIXED
RESISTOR SYMBOLS OR TAPPED RESISTOR SYMBOLS.

A 32 A3-09 DO YOU IDENTIFY OR CLASSIFY THE RESISTORS YOU WORK
WITH AS CARBON, FIXED WIRE, SLIDE TAP, RHEOSTAT, OR
POTENTIOMETER.

A 33 A3-10 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE OHMIC
VALUE OF RESISTANCE.

A 34 A3-11 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE
TOLERANCE.

A 35 A3-12 DO YOU USE RESISTOR COLOR CODES WHICH INDICATE
FAILURE RATE.

A 36 A3-13 DO YOU MAKE DECISIONS IN WHICH YOU MUST DETERMINE HOW
TWO OR MORE BATTERIES MUST BE CONNECTED TOGETHER TO
ACHIEVE A SPECIFIC VOLTAGE.

A 37 A3-14 DO YOU USE OR REFER TO THE SCHEMATIC SYMBOLS WHICH
REPRESENT BATTERIES, FUSES, CONDUCTORS, LAMPS, OR SWITCHES

A 38 A3-15 DO YOU CALCULATE TOTAL RESISTANCE FOR SERIES
RESISTIVE CIRCUITS.

A 39 A3-16 DO YOU CALCULATE TOTAL CURRENT FOR SERIES RESISTIVE
CIRCUITS.

A 40 A3-17 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROPS FOR SERIES
RESISTIVE CIRCUITS.

A 41 A3-18 DO YOU CALCULATE INDIVIDUAL POWER DISSIPATION FOR SERIES
RESISTIVE CIRCUITS.

A 42 A3-19 DO YOU CALCULATE TOTAL RESISTANCE FOR SERIES PARALLEL
RESISTIVE CIRCUITS.

A 43 A3-20 DO YOU CALCULATE TOTAL CURRENT FOR SERIES PARALLEL
RESISTIVE CIRCUITS.

A 44 A3-21 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROPS FOR SERIES
PARALLEL RESISTIVE CIRCUITS.

A 45 A3-22 DO YOU CALCULATE INDIVIDUAL BRANCH CURRENTS FOR
SERIES PARALLEL RESISTIVE CIRCUITS.

A 46 A3-23 DO YOU CALCULATE INDIVIDUAL POWER DISSIPATION FOR SERIES
PARALLEL RESISTIVE CIRCUITS.

A 47 A3-24 DO YOU CALCULATE TOTAL RESISTANCE FOR PARALLEL
RESISTIVE CIRCUITS.

A 48 A3-25 DO YOU CALCULATE TOTAL CURRENT FOR PARALLEL RESISTIVE
CIRCUITS.

A 49 A3-26 DO YOU CALCULATE INDIVIDUAL VOLTAGE DROPS FOR
PARALLEL RESISTIVE CIRCUITS.

A 50 A3-27 DO YOU CALCULATE INDIVIDUAL BRANCH CURRENTS FOR
PARALLEL RESISTIVE CIRCUITS.

A 51 A3-28 DO YOU CALCULATE INDIVIDUAL POWER DISSIPATION FOR PARALLEL
RESISTIVE CIRCUITS.

B MULTIMETER USES, ALTERNATING
CURRENT, INDUCTORS, AND INDUCTIVE
RESISTOR SYMBOLS OR TAPPED RESISTOR SYMBOLS.

A 52 A1-01 DO YOU MEASURE RESISTANCE.

B 53 B1-02 DO YOU REPAIR OHMMETERS.
 B 54 B1-03 DO YOU MEASURE VOLTAGE.
 B 55 B1-04 DO YOU REPAIR VOLTMETERS.
 B 56 B1-05 DO YOU REPAIR AMMETERS.
 B 57 B1-06 DO YOU MEASURE CURRENT.
 B 58 B1-07 DO YOU USE MULTIMETERS.
 B 59 B1-08 DO YOU DIRECTLY USE A QUANTITY OF CHARGE CALLED A COULOMB.

B 60 B1-09 DO YOU READ SCHEMATICS.
 B 61 B2-01 DO YOU USE OR REFER TO THE TERM EFFECTIVE VOLTAGE.
 (IRMS).
 B 62 B2-02 DO YOU USE OR REFER TO THE TERM PEAK TO PEAK VOLTAGE.
 B 63 B2-03 DO YOU USE OR REFER TO THE TERM AVERAGE VOLTAGE (DC).
 B 64 B2-04 DO YOU USE OR REFER TO THE TERM "WAVE LENGTH".
 B 65 B2-05 DO YOU USE OR REFER TO THE TERM FREQUENCY.
 B 66 B2-06 DO YOU USE OR REFER TO THE TERM INSTANTANEOUS VALUE.
 B 67 B2-07 DO YOU WORK WITH INDUCTORS OR CIRCUITS CONTAINING
 INDUCTORS, CHOKES, OR CHOKE COILS IN YOUR PRESENT JOB.
 B 68 B3-02 DO YOU INSPECT INDUCTORS.
 B 69 B3-03 DO YOU CLEAN INDUCTORS.
 B 70 B3-04 DO YOU ADJUST INDUCTORS.
 B 71 B3-05 DO YOU REMOVE OR REPLACE INDUCTORS.
 B 72 B3-06 DO YOU USE OR REFER TO INDUCTANCE.
 B 73 B3-07 DO YOU USE OR REFER TO HENRIES.
 B 74 B3-08 DO YOU USE OR REFER TO INDUCTIVE REACTANCE.
 B 75 B3-09 DO YOU USE OR REFER TO COPPER LOSS IN INDUCTORS.
 B 76 B3-10 DO YOU USE OR REFER TO HYSTERESIS LOSS IN INDUCTORS.
 B 77 B3-11 DO YOU USE OR REFER TO EDDY CURRENT LOSS IN INDUCTORS.
 B 78 B3-12 DO YOU USE OR REFER TO THE GENERAL RULE THAT
 INDUCTANCE IS PROPORTIONAL TO THE SQUARE OF THE NUMBER OF
 TURNS OF THE COIL.

B 79 B2-13 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE IN-
 DUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE CROSS
 SECTIONAL AREA OF THE CORE.

B 80 B2-14 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE
 INDUCTANCE OF A COIL IS INVERSELY PROPORTIONAL TO ITS
 LENGTH.

B 81 B2-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE
 INDUCTANCE OF A COIL IS DIRECTLY PROPORTIONAL TO THE
 PERMEABILITY OF THE CORE MATERIAL.

B 82 B2-16 DO YOU CALCULATE INDUCTANCE FOR PARTICULAR INDUCTORS
 USING FORMULAS.

B 83 B3-17 DO YOU CALCULATE THE TOTAL INDUCTANCE FOR INDUCTANCE
 IN SERIES.

B 84 B3-18 DO YOU CALCULATE THE TOTAL INDUCTANCE FOR INDUCTORS
 IN PARALLEL.

B 85 B3-19 DO YOU CALCULATE THE TOTAL INDUCTANCE FOR INDUCTORS
 IN SERIES-PARALLEL CIRCUITS.

B 86 B3-20 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT
 LAGS VOLTAGE IN AC INDUCTOR CIRCUITS.

B 87 B3-21 DO YOU CALCULATE INDUCTIVE REACTANCE.

B 88 B3-22 DO YOU USE OR REFER TO THE GENERAL RULE THAT

C 92 C1-01 DO YOU WORK WITH CAPACITORS OR CIRCUITS CONTAINING
 CAPACITORS IN YOUR PRESENT JOB.
 C 93 C1-02 DO YOU INSPECT CAPACITORS.
 C 94 C1-03 DO YOU CLEAN CAPACITORS.
 C 95 C1-04 DO YOU ADJUST CAPACITORS.
 C 96 C1-05 DO YOU TEST CAPACITORS.
 C 97 C1-06 DO YOU DISCHARGE CAPACITORS.
 C 98 C1-07 DO YOU REMOVE OR REPLACE CAPACITORS.
 C 99 C1-08 DO YOU USE OR REFER TO DISTRIBUTED CAPACITANCE.
 C100 C1-09 DO YOU USE OR REFER TO ORBITAL STRESS OF ELECTRONS IN
 A DIELECTRIC.
 C101 C1-10 DO YOU USE OR REFER TO FARADS, MICROFARADS, OR
 PICOFARADS.
 C102 C1-11 DO YOU USE OR REFER TO CAPACITANCE.
 C103 C1-12 DO YOU USE OR REFER TO DIELECTRIC CONSTANT
 C104 C1-13 DO YOU USE OR REFER TO WORKING VOLTAGE RATING OF
 CAPACITORS.
 C105 C1-14 DO YOU USE OR REFER TO CAPACITIVE REACTANCE
 C106 C1-15 DO YOU USE OR REFER TO CAPACITOR COLOR CODES
 C107 C1-16 DO YOU WORK WITH CAPACITORS IN DC CIRCUITS
 C108 C1-17 DO YOU WORK WITH CAPACITORS IN AC CIRCUITS
 C109 C1-18 DO YOU WORK WITH CAPACITORS IN CIRCUITS WITH BOTH DC
 AND AC CIRCUITS.
 C110 C1-19 DO YOU WORK WITH CAPACITORS IN DON'T REMEMBER WHICH
 C111 C1-20 DO YOU CALCULATE CAPACITANCE FOR PARTICULAR
 CAPACITORS USING FORMULAS
 C112 C1-21 DO YOU USE OR REFER TO THE GENERAL RULE THAT
 CAPACITANCE OF A CAPACITOR IS DIRECTLY PROPORTIONAL TO THE
 DIELECTRIC CONSTANT
 C113 C1-22 DO YOU USE OR REFER TO THE GENERAL RULE THAT
 CAPACITANCE OF A CAPACITOR IS INVERSELY PROPORTIONAL TO
 THE DIELECTRIC THICKNESS
 C114 C1-23 DO YOU CALCULATE THE TOTAL CAPACITANCE OF CAPACITORS
 IN SERIES
 C115 C1-24 DO YOU CALCULATE THE TOTAL CAPACITANCE OF CAPACITORS
 IN PARALLEL
 C116 C1-25 DO YOU CALCULATE THE TOTAL CAPACITANCE OF CAPACITORS
 IN SERIES-PARALLEL CIRCUITS
 C117 C1-26 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT
 DOES NOT FLOW THROUGH CAPACITORS, IT ONLY APPEARS TO DO SO
 C118 C1-27 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT
 LEADS VOLTAGE IN AC CAPACITOR CIRCUITS

C119 C1-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT

CAPACITIVE REACTANCE IS INVERSELY PROPORTIONAL TO

FREQUENCY

C120 C1-29 DO YOU CALCULATE CAPACITIVE REACTANCE

C121 C1-30 DO YOU WORK WITH MOTOR-STATOR (VARIABLE) CAPACITORS

C122 C1-31 DO YOU WORK WITH COMPRESSION (TRIMMER) CAPACITORS

C123 C1-32 DO YOU WORK WITH ELECTROLYTIC (FIXED) CAPACITORS

C124 C1-33 DO YOU WORK WITH PAPER (FIFO) CAPACITORS

C125 C1-34 DO YOU WORK WITH MICA (FIXED) CAPACITORS

C126 C1-35 DO YOU WORK WITH CERAMIC (FIXED) CAPACITORS

C127 C1-36 DO YOU WORK WITH DON'T REMEMBER WHICH TYPE OF CAPACITORS

C128 C2-01 DO YOU WORK WITH TRANSFORMERS IN YOUR PRESENT JOB

C129 C2-02 DO YOU INSPECT TRANSFORMERS

C130 C2-03 DO YOU CLEAN TRANSFORMERS

C131 C2-04 DO YOU ADJUST TRANSFORMERS

C132 C2-05 DO YOU TROUBLESHOOT TRANSFORMERS

C133 C2-06 DO YOU REMOVE OR REPLACE COMPLETE TRANSFORMERS

C134 C2-07 DO YOU REMOVE OR REPLACE TRANSFORMER PARTS, SUCH AS THE PRIMARY WINDING

C135 C2-08 DO YOU MAKE A DISTINCTION BETWEEN MUTUAL INDUCTION AND MUTUAL INDUCTION (MI)

C136 C2-09 DO YOU USE THE SYMBOL FOR MUTUAL INDUCTANCE, M

C137 C2-10 DO YOU REFER TO OR USE THE COEFFICIENT OF COUPLING WHEN WORKING WITH TRANSFORMERS

C138 C2-11 DO YOU CALCULATE TURNS RATIOS FOR TRANSFORMERS USING CURRENT OR VOLTAGE RATIOS

C139 C2-12 DO YOU REFER TO REFLECTED IMPEDANCE WHEN WORKING WITH TRANSFORMERS

C140 C2-13 DO YOU CALCULATE IMPEDANCE INTERACTIONS FOR TRANSFORMERS

C141 C2-14 DO YOU WORK WITH AUTOTRANSFORMERS

C142 C2-15 DO YOU WORK WITH POWER TRANSFORMERS

C143 C2-16 DO YOU WORK WITH AUDIO TRANSFORMERS

C144 C2-17 DO YOU WORK WITH RADIO FREQUENCY TRANSFORMERS

C145 C2-18 DO YOU WORK WITH DON'T REMEMBER WHAT TYPE OF TRANSFORMERS

C146 C2-19 DO YOU CHECK TRANSFORMERS FOR OPEN WINDINGS BY MEASURING RESISTANCE

C147 C2-20 DO YOU CHECK TRANSFORMERS FOR SHORTED WINDINGS BY MEASURING RESISTANCE

C148 C2-21 DO YOU CHECK TRANSFORMERS FOR SHORTED WINDINGS BY MEASURING OUTPUT VOLTAGES

C149 C2-22 DO YOU MEASURE RESISTANCE OF TRANSFORMER WINDINGS TO DETERMINE WHETHER A TRANSFORMER HAS A STEP-UP OR STEP-DOWN TURNS RATIO

C150 C2-23 DO YOU MEASURE OUTPUT VOLTAGE OF TRANSFORMERS TO DETERMINE WHETHER A TRANSFORMER HAS A STEP-UP OR STEP-DOWN TURNS RATIO

C151 C2-24 DO YOU REFER TO BASIC TRANSFORMER SCHEMATIC SYMBOLS FOR TRANSFORMERS

C152 C2-25 DO YOU REFER TO MULTIPLE SECONDARY=WINDINGS SCHEMATIC SYMBOLS FOR TRANSFORMERS

C153 C2-26 DO YOU REFER TO MULTIPLE TAP SCHEMATIC SYMBOLS FOR TRANSFORMERS

C154 C2-27 DO YOU REFER TO CENTER TAP SCHEMATIC SYMBOLS FOR TRANSFORMERS

C155 C2-28 DO YOU REFER TO AIR CORE SCHEMATIC SYMBOLS FOR TRANSFORMERS

C156 C2-29 DO YOU REFER TO IRON CORE SCHEMATIC SYMBOLS FOR TRANSFORMERS

C157 C2-30 DO YOU REFER TO COMBINATIONS OF THE ABOVE SCHEMATIC SYMBOLS FOR TRANSFORMERS

C158 C2-31 DO YOU DETERMINE PHASE RELATIONSHIPS BETWEEN SECONDARY AND PRIMARY VOLTAGES OF TRANSFORMERS USING SCHEMATIC SYMBOLS

C159 C2-32 DO YOU DETERMINE OR REFER TO THE TYPE OF CORE IN TRANSFORMERS YOU WORK WITH

C160 C2-33 DO YOU REFER TO OR USE THE GENERAL RULE THAT THE TURNS RATIO OF A TRANSFORMER IS EQUAL TO THE VOLTAGE RATIO FOR TRANSFORMERS

C161 C2-34 DO YOU USE OR REFER TO STEP-UP OR STEP-DOWN RATIOS FOR TRANSFORMERS

C162 C2-35 DO YOU CALCULATE VOLTAGE RATIOS FOR TRANSFORMERS USING TURNS RATIOS

C163 C2-36 DO YOU CALCULATE CURRENT RATIOS FOR TRANSFORMERS USING TURNS RATIOS

C164 C2-37 DOES YOUR JOB INVOLVE ANY TASKS DEALING WITH THREE PHASE TRANSFORMERS

C165 C2-38 DO YOU INSPECT THREE PHASE TRANSFORMERS

C166 C2-39 DO YOU CLEAN OR LUBRICATE THREE PHASE TRANSFORMERS

C167 C2-40 DO YOU ADJUST THREE PHASE TRANSFORMERS

C168 C2-41 DO YOU TROUBLESHOOT THREE PHASE TRANSFORMERS

C169 C2-42 DO YOU REMOVE OR REPLACE COMPLETE THREE PHASE TRANSFORMERS

C170 C2-43 DO YOU REMOVE OR REPLACE THREE PHASE TRANSFORMER PARTS SUCH AS WINDINGS

C171 C3-01 DO YOU USE OR REFER TO PERMANENT MAGNETS

C172 C3-02 DO YOU USE OR REFER TO TEMPORARY MAGNETS

C173 C3-03 DO YOU USE OR REFER TO RETENTIVITY OF MAGNETIC MATERIALS

C174 C3-04 DO YOU USE OR REFER TO RELUCTANCE OF MAGNETIC MATERIALS

C175 C3-05 DO YOU USE OR REFER TO PERMEABILITY OF MAGNETIC MATERIALS

C176 C3-06 DO YOU USE OR REFER TO RESIDUAL MAGNETISM

C177 C3-07 DO YOU USE OR REFER TO MAGNETIC LINES OF FORCE OR FLUX

C178 C3-08 DO YOU USE OR REFER TO WEBER'S THEORY OF MAGNETISM

C179 C3-09 DO YOU USE OR REFER TO DOMAIN THEORY OF MAGNETISM

C180 C3-10 DO YOU USE OR REFER TO MAGNETIC INDUCTION

C181 C3-11 DO YOU USE OR REFER TO FLUX DENSITY

C182 C3-12 DO YOU USE OR REFER TO THE GENERAL RULE THAT FOR MAGNETIC POLES, LIKE POLES REPEL AND UNLIKE POLES ATTRACT

C183 C3-13 DO YOU USE THE LEFT HAND THUMB RULE TO FIND THE DIRECTION OF MAGNETIC FIELDS ABOUT STRAIGHT WIRES

C144 C-14 DO YOU USE THE LEFT HAND THUMBS RULE TO FIND THE NORTH POLE OF A CURRENT CARRYING COIL

D185 RCL CIRCUITS, SERIES AND PARALLEL RESONANCE (TIME CONSTANTS), AND FILTERS

D187 D1-03 DO YOU USE OR REFER TO PYTHAGOREAN THEOREM WHEN WORKING WITH RCL CIRCUITS

D188 D1-04 DO YOU USE OR REFER TO SINE WHEN WORKING WITH RCL CIRCUITS

D189 D1-05 DO YOU USE OR REFER TO COSINE WHEN WORKING WITH RCL CIRCUITS

D190 D1-06 DO YOU USE OR REFER TO TANGENT WHEN WORKING WITH RCL CIRCUITS

D191 D1-07 DO YOU USE OR REFER TO WATTS WHEN WORKING WITH RCL CIRCUITS

D192 D1-08 DO YOU USE OR REFER TO TRUE POWER (PT) WHEN WORKING WITH RCL CIRCUITS

D193 D1-09 DO YOU USE OR REFER TO MAXIMUM POWER (PM) WHEN WORKING WITH RCL CIRCUITS

D194 D1-10 DO YOU USE OR REFER TO AVERAGE POWER (PAVE) WHEN WORKING WITH RCL CIRCUITS

D195 D1-11 DO YOU USE OR REFER TO APPARENT POWER (PA) WHEN WORKING WITH RCL CIRCUITS

D196 D1-12 DO YOU USE OR REFER TO POWER FACTOR (PF) WHEN WORKING WITH RCL CIRCUITS

D197 D1-13 DO YOU USE OR REFER TO RESONANT CIRCUITS WHEN WORKING WITH RCL CIRCUITS

D198 D1-14 DO YOU USE OR REFER TO BANDWIDTH WHEN WORKING WITH RCL CIRCUITS

D199 D1-15 DO YOU USE OR REFER TO SELECTIVITY WHEN WORKING WITH RCL CIRCUITS

D200 D1-16 DO YOU USE OR REFER TO RESONANT FREQUENCY WHEN WORKING WITH RCL CIRCUITS

D201 D1-17 DO YOU USE OR REFER TO HALF POWER POINTS WHEN WORKING WITH RCL CIRCUITS

D202 D1-18 DO YOU USE OR REFER TO BANDPASS REGION WHEN WORKING WITH RCL CIRCUITS

D203 D1-19 DO YOU USE OR REFER TO CIRCUIT Q WHEN WORKING WITH RCL CIRCUITS

D204 D1-20 DO YOU USE OR REFER TO TANK CIRCUITS WHEN WORKING WITH RCL CIRCUITS

D205 D1-21 DO YOU DETERMINE VALUES OF TRIGONOMETRIC FUNCTIONS USING FORMULAS

D206 D1-22 DO YOU DRAW VOLTAGE, CURRENT, OR IMPEDANCE VECTOR DIAGRAMS FOR CIRCUITS

D207 D1-23 DO YOU CALCULATE TOTAL IMPEDANCE FOR CAPACITIVE CIRCUITS

D208 D1-24 DO YOU CALCULATE PHASE ANGLES BETWEEN IMPEDANCE AND RESISTANCE IN CAPACITIVE CIRCUITS

D209 D1-25 DO YOU CALCULATE TOTAL IMPEDANCE FOR SERIES RCL CIRCUITS

D210 D1-26 DO YOU CALCULATE IMPEDANCE ANGLES FOR SERIES RCL CIRCUITS

D213 D1-29 DO YOU CALCULATE POWER FACTORS (PF) FOR SERIES RCL CIRCUITS

D214 D1-30 DO YOU CALCULATE TOTAL CURRENT FOR PARALLEL RCL CIRCUITS

D215 D1-31 DO YOU CALCULATE IMPEDANCE ANGLES FOR PARALLEL RCL CIRCUITS

D216 D1-32 DO YOU CALCULATE TOTAL IMPEDANCE FOR PARALLEL RCL CIRCUITS USING THE ASSUMED VOLTAGE METHOD

D217 D1-33 DO YOU CALCULATE TOTAL IMPEDANCE FOR PARALLEL RCL CIRCUITS USING OHM'S LAW

D218 D1-34 DO YOU CHECK CAPACITORS USING OMMETERS

D219 D1-35 DO YOU CHECK CAPACITORS USING SUBSTITUTION

D220 D1-36 DO YOU CHECK INDUCTORS USING OMMETERS

D221 D1-37 DO YOU CHECK INDUCTORS USING SUBSTITUTION

D222 D1-38 DO YOU USE OR REFER TO THE GENERAL RULE THAT $IMETAN = 0$, $PF = 1$, AND $PA = PT$ FOR RESONANT CIRCUITS

D223 D1-39 DO YOU CALCULATE RESONANT FREQUENCIES FOR RCL CIRCUITS

D224 D1-40 DO YOU USE OR REFER TO THE GENERAL RULE THAT IMPEDANCE IS MINIMUM AND CURRENT MAXIMUM AT THE RESONANT FREQUENCY FOR SERIES RCL CIRCUITS

D225 D1-41 DO YOU USE OR REFER TO THE GENERAL RULE THAT LINE CURRENT IS MINIMUM AND IMPEDANCE MAXIMUM AT RESONANT FREQUENCY FOR PARALLEL RCL CIRCUITS

D226 D1-42 DO YOU USE OR REFER TO THE GENERAL RULE THAT HALF POWER POINTS ARE AT 70.7 PERCENT OF THE PEAK CURRENT VALUE

D227 D1-43 DO YOU USE OR REFER TO THE GENERAL RULE THAT BANDWIDTH IS INVERSELY PROPORTIONAL TO Q

D228 D1-44 DO YOU DETERMINE HOW CHANGES IN FREQUENCY, RESISTANCE, CAPACITANCE, OR INDUCTANCE WILL AFFECT CURRENT OR PHASE ANGLES FOR RCL CIRCUITS

D229 D2-01 IN YOUR PRESENT JOB, DO YOU WORK WITH, USE, OR REFER TO SERIES OR PARALLEL RESONANT CIRCUITS OR TIME CONSTANTS

D230 D2-02 DO YOU WORK WITH, USE, OR REFER TO TIME CONSTANTS

D231 D2-03 DO YOU WORK WITH, USE, OR REFER TO AVAILABLE VOLTAGE INTERVALS

D232 D2-04 DO YOU WORK WITH, USE, OR REFER TO TRANSIENT

D233 D2-05 DO YOU USE OR REFER TO THE GENERAL RULE THAT A CAPACITOR IS FULLY CHARGED (OR DISCHARGED) AFTER FIVE (5) TIME CONSTANTS (TC)

D234 D2-06 DO YOU USE OR REFER TO UNIVERSAL TIME CONSTANT CHARTS

D235 D2-07 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE

CIRCUIT CURRENT OR COMPONENT VOLTAGES AFTER A SPECIFIC TIME FOR RC OR LR CIRCUITS
0236 02-09 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE TIME REQUIRED FOR CIRCUIT CURRENT OR COMPONENT TO REACH SPECIFIC VALUES FOR RC OR LR CIRCUITS

0237 02-09 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE COMPONENT VALUES REQUIRED FOR CIRCUIT CURRENT AND COMPONENT VOLTAGES TO REACH SPECIFIC VALUES IN SPECIFIC TIMES

0238 02-10 DO YOU USE OR REFER TO THE GENERAL RULE THAT CURRENT IN LR CIRCUITS REACHES ITS MINIMUM VALUE (OR ZERO) AFTER FIVE (5) TIME CONSTANTS

0239 03-01 DO YOU WORK WITH CIRCUITS USED AS FILTERS IN YOUR PRESENT JOB

0240 03-02 DO YOU INSPECT FILTER CIRCUITS

0241 03-03 DO YOU CLEAN FILTER CIRCUITS

0242 03-04 DO YOU ALIGN OR ADJUST FILTER CIRCUITS

0243 03-05 DO YOU TROUBLESHOOT TO THE FILTER CIRCUIT LEVEL

0244 03-06 DO YOU TROUBLESHOOT TO COMPONENT PARTS

0245 03-07 DO YOU REMOVE OR REPLACE THE COMPLETE FILTER CIRCUIT

0246 03-08 DO YOU REMOVE OR REPLACE FILTER CIRCUIT COMPONENT PARTS

0247 03-09 DO YOU WORK WITH LOW PASS FILTERS

0248 03-10 DO YOU WORK WITH HIGH PASS FILTERS

0249 03-11 DO YOU WORK WITH BANDPASS FILTERS

0250 03-12 DO YOU WORK WITH BAND-REJECT FILTERS

0251 03-13 DON'T REMEMBER WHICH TYPE OF FILTER YOU WORK WITH

0252 03-14 DO YOU WORK WITH L-SECTION FILTER CONFIGURATION

0253 03-15 DO YOU WORK WITH T-SECTION FILTER CONFIGURATION

0254 03-16 DO YOU WORK WITH PI-SECTION FILTER CONFIGURATION

0255 03-17 DON'T REMEMBER WHICH TYPE FILTER CONFIGURATION

0256 03-18 DO THE FILTERS YOU WORK WITH USE PARALLEL RESONANT CIRCUITS

0257 03-19 DO THE FILTERS YOU WORK WITH USE SERIES-PARALLEL CIRCUITS

0258 03-20 DO THE FILTERS YOU WORK WITH USE SERIES RESONANT CIRCUITS

0259 03-21 DON'T REMEMBER WHICH TYPE OF BASIC CIRCUIT

0260 03-22 DO YOU USE EQUATIONS OR FORMULAS TO DETERMINE CAPACITANCE OR INDUCTANCE VALUES REQUIRED FOR SPECIFIC FILTERS

E COUPLING, SOLDERING, AND RELAYS

E261 E1-01 DO YOU WORK WITH COUPLING DEVICES IN YOUR PRESENT JOB

E262 E1-02 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH RC COUPLING

E263 E1-03 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH IMPEDANCE COUPLING

E264 E1-04 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO

THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH TRANSFORMER COUPLING

E265 E1-05 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM RC-COUPING

E266 E1-06 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM IMPEDANCE COUPLING

E267 E1-07 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM TRANSFORMER COUPLING

E268 E1-08 DO YOU WORK WITH DIRECTLY COUPLED CIRCUITS

E269 E1-09 DO YOU WORK WITH CAPACITIVE-RESISTIVE COUPLED CIRCUITS

E270 F1-10 DO YOU WORK WITH CAPACITIVE-INDUCTIVE COUPLED CIRCUITS

E271 F1-11 DO YOU WORK WITH TRANSFORMER COUPLED CIRCUITS

E272 F1-12 DON'T REMEMBER WHICH TYPE OF COUPLING CIRCUITS

E273 F2-01 IN YOUR PRESENT JOB, DO YOU PERFORM SOLDERING TECHNIQUES OR INSPECT OR EVALUATE SOLDERED CONNECTIONS

E274 F2-02 DO YOU SELECT TYPE OF SOLDER TO USE

E275 F2-03 DO YOU ADD FLUX TO CONNECTIONS

E276 F2-04 DO YOU CLEAN CONNECTIONS USING SOLVENTS

E277 F2-05 DO YOU STRIP INSULATION FROM WIRES

E278 F2-06 DO YOU CONNECT OR DISCONNECT HEAT SINKS

E279 F2-07 DO YOU BEND OR SHAPE WIRES OR LEADS

E280 F2-08 DO YOU CUT WIRES

E281 F2-09 DO YOU FILE OR SHAPE SOLDERING IRON TIPS

E282 F2-10 DO YOU TIN SOLDERING IRON TIPS

E283 F2-11 DO YOU CLEAN SOLDERING IRON TIPS

E284 F2-12 DO YOU CLEAN ELECTRICAL SURFACES USING ERASERS

E285 F2-13 DO YOU TIN OR PRE-TIN CONDUCTORS

E286 F2-14 DO YOU INSPECT SOLDERED CONNECTIONS

E287 F2-15 DO YOU DESOLDER CONNECTIONS BY WICKING

E288 F2-16 DO YOU DESOLDER CONNECTIONS USING VACUUM DESOLDERING

E289 F2-17 DO YOU CUT COMPONENT LEADS TO REMOVE COMPONENTS

E290 F2-18 DO YOU CRUSH COMPONENTS FOR REMOVAL

E291 F2-19 DO YOU MAKE HARDWARE CONNECTIONS

E292 F2-20 DO YOU MAKE PRINTED CIRCUIT BOARD CONNECTIONS

E293 F2-21 DO YOU SOLDER PASSIVE COMPONENTS SUCH AS RESISTORS OR

E294 F2-22 DO YOU SOLDER ACTIVE COMPONENTS SUCH AS SOLID-STATE DIODES OR TRANSISTORS ON PRINTED CIRCUIT BOARDS

E295 F3-01 DO YOU WORK WITH RELAYS ON YOUR PRESENT JOB

E296 F3-02 DO YOU ADJUST RELAYS

E297 F3-03 DO YOU CLEAN RELAYS

E298 F3-04 DO YOU INSPECT RELAYS

E299 F3-05 DO YOU REMOVE OR REPLACE COMPLETE RELAYS

E300 F3-06 DO YOU REMOVE OR REPLACE PARTS OR RELAYS

E301 F3-07 DO YOU TROUBLESHOOT RELAYS

E302 F3-08 DO YOU STRAIGHTEN RELAY CONTACTS

E303 F3-09 DO YOU PERFORM TASKS ON RELAY CONTACTS

E304 F3-10 DO YOU PERFORM TASKS ON RELAY COILS

E305 F3-11 DO YOU PERFORM TASKS ON RELAY COILS

E306 E3-12 DO YOU PERFORM TASKS ON RELAY AMMATURES
E307 E3-13 DO YOU PERFORM TASKS ON RELAY SPRINGS
E308 E3-14 DO YOU USE OR REFER TO SINGLE POLE, SINGLE THROW
(SINGLE, NORMALLY OPER (NO) SCHEMATIC SYMBOLS FOR RELAYS
E309 E3-15 DO YOU USE OR REFER TO SINGLE POLE, SINGLE THROW
(SINGLE, NORMALLY CLOSED (NC) SCHEMATIC SYMBOLS FOR RELAYS
(SINGLE, NORMALLY OPEN (NO) SCHEMATIC SYMBOLS FOR RELAYS
E310 E3-16 DO YOU USE OR REFER TO SINGLE POLE, DOUBLE THROW
E311 E3-17 DO YOU USE OR REFER TO DOUBLE POLE, DOUBLE THROW
(DOPDT) SCHEMATIC SYMBOLS FOR RELAYS
E312 E3-18 DO YOU USE OR REFER TO OTHER RELAY SYMBOLS SCHEMATIC
E313 E3-19 DO YOU CHECK ELECTRICAL CONTINUITY OF COILS BY
MEASURING RESISTANCE

F MICROPHONES, SPEAKERS, AND OSCILLOSCOPES

F314 F1-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING
WITH MICROPHONES
F315 F1-02 DO YOU INSPECT MICROPHONES
F316 F1-03 DO YOU CLEAN MICROPHONES
F317 F1-04 DO YOU OPERATE MICROPHONES
F318 F1-05 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE
CONNECTIONS, BUT DO NOT TROUBLESHOOT DOWN TO COMPONENT
PARTS OR MICROPHONES

F319 F1-06 DO YOU TROUBLESHOOT DOWN TO MICROPHONE PARTS
F320 F1-07 DO YOU REMOVE OR REPLACE COMPLETE MICROPHONES
F321 F1-08 DO YOU REMOVE OR REPLACE MICROPHONE PARTS

F322 F1-09 DO YOU PERFORM TASKS ON CARBON MICROPHONES
F323 F1-10 DO YOU PERFORM TASKS ON CAPACITOR MICROPHONES
F324 F1-11 DO YOU PERFORM TASKS ON CRYSTAL MICROPHONES
F325 F1-12 DO YOU PERFORM TASKS ON DYNAMIC MICROPHONES
F326 F1-13 DO YOU PERFORM TASKS ON VELOCITY RIBBON MICROPHONES
F327 F2-01 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS DEALING
WITH SPEAKERS

F328 F2-02 DO YOU INSPECT SPEAKERS
F329 F2-03 DO YOU CLEAN SPEAKERS
F330 F2-04 DO YOU OPERATE SPEAKERS
F331 F2-05 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE
CONNECTIONS, BUT DO NOT TROUBLESHOOT DOWN TO COMPONENT
PARTS OF SPEAKERS

F332 F2-06 DO YOU TROUBLESHOOT DOWN TO SPEAKER PARTS
F333 F2-07 DO YOU REMOVE OR REPLACE COMPLETE SPEAKERS
F334 F2-08 DO YOU REMOVE OR REPLACE SPEAKER PARTS

F335 F2-09 DO YOU PERFORM ANY TASKS ON SPEAKER CONES
F336 F2-10 DO YOU PERFORM ANY TASKS ON SPEAKER SPIDERS
F337 F2-11 DO YOU PERFORM ANY TASKS ON SPEAKER FIELD COILS
F338 F2-12 DO YOU PERFORM ANY TASKS ON SPEAKER VOICE COILS
F339 F2-13 DO YOU PERFORM ANY TASKS ON SPEAKER PERMANENT MAGNETS
F340 F2-14 DO YOU PERFORM ANY TASKS ON SPEAKER ELECTROMAGNETS
F341 F2-15 DO YOU PERFORM ANY TASKS ON SPEAKER SOFT IRON CORES
F342 F3-01 DO YOU USE OSCILLOSCOPES IN YOUR PRESENT JOB

F343 F3-02 DO YOU USE OSCILLOSCOPES TO PERFORM OPERATIONAL
CHECKS
F344 F3-03 DO YOU USE OSCILLOSCOPES TO PERFORM ALIGNMENTS OR
ADJUSTMENTS
F345 F3-04 DO YOU USE OSCILLOSCOPES TO TROUBLESHOOT ELECTRONIC
CIRCUITS
F346 F3-05 DO YOU USE OSCILLOSCOPES TO MEASURE FREQUENCY
F347 F3-06 DO YOU USE OSCILLOSCOPES TO MEASURE TIME
F348 F3-07 DO YOU USE OSCILLOSCOPES TO OBSERVE LISAJOUS PATTERNS
F349 F3-08 DO YOU USE OSCILLOSCOPES TO OBSERVE SIGNALS WHILE
UTILIZING ATTENUATOR PROBES
F350 F3-09 DO YOU USE OSCILLOSCOPES TO MAKE FREQUENCY OR TIME
MEASUREMENTS USING DELAY TIME MULTIPLIERS
F351 F3-10 DO YOU USE OSCILLOSCOPES TO MEASURE AC VOLTAGE
F352 F3-11 DO YOU USE OSCILLOSCOPES TO MEASURE OR OBSERVE
SIGNALS AFTER FIRST ADJUSTING THE GAIN AND DC BAL CONTROLS

F353 F3-12 DO YOU USE OSCILLOSCOPES TO MEASURE DC VOLTAGE

6 SEMICONDUCTOR DIODES, TRANSISTORS, AND TRANSISTOR
AMPLIFIERS

G354 G1-01 DO YOU WORK WITH SEMICONDUCTOR DIODES IN YOUR PRESENT
JOB

G355 G1-02 DO YOU INSPECT DIODES
G356 G1-03 DO YOU REMOVE OR REPLACE DIODES
G357 G1-04 DO YOU CHECK DIODES USING AN INSTRUMENT
G358 G1-05 DO YOU USE ENERGY LEVEL DIAGRAMS IN YOUR WORK WITH
DIODES

G369 G1-06 DO YOU USE PN JUNCTION DIODE CHARACTERISTIC CURVES,
TOGETHER WITH VALUES OF FORWARD AND REVERSE BIAS VOLTAGE,
TO COMPUTE FORWARD OR REVERSE LIAS RESISTANCE
G360 G1-07 DO YOU COMPUTE FORWARD OR REVERSE BIAS RESISTANCE FOR
DIODES

G361 G1-08 DO YOU USE OR REFER TO THE GENERAL RULE THAT
TEMPERATURE CAN AFFECT THE OPERATION OF DIODES
G362 G1-09 DO YOU IDENTIFY SEMICONDUCTOR DIODES AS OPPOSED TO
OTHER ELECTRONIC COMPONENTS, SUCH AS RESISTORS, BASED ON
THEIR PHYSICAL APPEARANCE

G363 G1-10 DO YOU REFER TO OR DO YOU DETERMINE THE GENERAL
EFFECTS OF DOING ON CURRENT FLOW

G364 G1-11 DO YOU USE OR REFER TO MEASUREMENTS OF FORWARD BIAS
RESISTANCE

G365 G1-12 DO YOU USE OR REFER TO DIODE COLOR CODING
G366 G1-13 DO YOU USE OR REFER TO CENTRIFUGAL FORCE OF AN
ELECTRON IN ORBIT AROUND A NUCLEUS
G367 G1-14 DO YOU USE OR REFER TO CENTRIPETAL FORCE OF AN
ELECTRON IN ORBIT AROUND A NUCLEUS

G368 G1-15 DO YOU USE OR REFER TO DIODE NUMBERING SYSTEM, SUCH
AS IN 538

G369 G1-16 DO YOU USE OR REFER TO KINETIC ENERGY OF AN ELECTRON
MOVING IN ORBIT

G370 G1-17 DO YOU USE OR REFER TO POTENTIAL ENERGY OF AN

6371 G1-18 DO YOU USE OR REFER TO MEASUREMENTS OF REVERSE BIAS
RESISTANCE
6372 G1-19 DO YOU USE OR REFER TO NUMBER OF ELECTRONS IN A
PARTICULAR SHELL OR ORBIT
6373 G1-20 DO YOU USE OR REFER TO PERMISSIBLE ENERGY LEVELS OF
AN ORBITING ELECTRON
6374 G1-21 DO YOU USE OR REFER TO FORBIDDEN ENERGY LEVELS OF AN
ORBITING ELECTRON
6375 G1-22 DO YOU USE OR REFER TO VALENCE ELECTRONS (THOSE IN
THE OUTERMOST SHELL)
6376 G1-23 DO YOU USE OR REFER TO ATOMIC NUMBER (TOTAL NUMBER OF
ELECTRONS IN ATOM)
G377 G1-24 DO YOU USE OR REFER TO SYMBOLS ON THE DIODE WHICH
INDICATE THE CATHODE END
G378 G1-25 DO YOU NEED TO KNOW WHICH MATERIALS ARE USED IN THE
CONSTRUCTION OF DIODES SUCH AS GERMANIUM OR SILICON
G379 G1-26 DO YOU NEED TO KNOW THAT SEMICONDUCTORS HAVE NEGATIVE
TEMPERATURE COEFFICIENTS OF RESISTANCE (AS TEMPERATURE
INCREASES RESISTANCE DECREASES)
G380 G1-27 DO YOU USE OR REFER TO PN JUNCTION DIODE
CHARACTERISTIC CURVES (SUCH AS VOLTAGE - CURRENT
CHARACTERISTIC CURVES) (PERHAPS YOU DO THIS TO IDENTIFY
POINTS OF STRUCTURAL BREAKDOWN OR OPERATING REGIONS)
G381 G1-28 DO YOU DETERMINE WHETHER PN JUNCTION DIODES ARE
FORWARD BIADED OR REVERSE BIADED WHEN YOU READ OR
INTERPRET CIRCUIT DIAGRAMS
G382 G1-29 DO YOU USE OR REFER TO VALENCE BAND IN SEMICONDUCTOR
MATERIALS
G383 G1-30 DO YOU USE OR REFER TO FORBIDDEN BAND IN
SEMICONDUCTOR MATERIALS
G384 G1-31 DO YOU USE OR REFER TO CONDUCTION BAND IN
SEMICONDUCTOR MATERIALS
G385 G1-32 DO YOU USE OR REFER TO COVALENT BONDING IN
SEMICONDUCTOR MATERIALS
G386 G1-33 DO YOU USE OR REFER TO ELECTRON-HOLE PAIR CREATED IN
SEMICONDUCTORS
G387 G1-34 DO YOU USE OR REFER TO ELECTRON FLOW OR HOLE FLOW IN
SEMICONDUCTORS
G388 G1-35 DO YOU USE OR REFER TO DONOR IMPURITY IN
SEMICONDUCTORS
G389 G1-36 DO YOU USE OR REFER TO ACCEPTOR IMPURITY IN
SEMICONDUCTORS
G390 G1-37 DO YOU USE OR REFER TO P-TYPE SEMICONDUCTOR MATERIAL
G391 G1-38 DO YOU USE OR REFER TO N-TYPE SEMICONDUCTOR MATERIAL
G392 G1-39 DO YOU USE OR REFER TO MAJORITY CARRIERS IN
SEMICONDUCTORS
G393 G1-40 DO YOU USE OR REFER TO MINORITY CARRIERS IN
SEMICONDUCTORS
G394 G1-41 DO YOU USE OR REFER TO JUNCTION RECOMBINATION IN
SEMICONDUCTORS
G395 G1-42 DO YOU USE OR REFER TO DEPLETION REGION IN

6396 G1-43 DO YOU USE OR REFER TO RELATIONSHIP BETWEEN BARRIER
WIDTH AND DIFFERENCE OF POTENTIAL
6397 G1-44 DO YOU USE OR REFER TO THE I_O; BACK TO FRONT
RESISTANCE RATIO FOR DIODES
6398 G1-45 DO YOU USE OR REFER TO BARRIER HEIGHT IN
SEMICONDUCTORS
6399 G1-46 DO YOU USE OR REFER TO DIODE SUBSTITUTION
INFORMATION

6400 G1-47 DO YOU USE OR REFER TO MAXIMUM AVERAGE FORWARD
CURRENT DIODE RATINGS
6401 G1-48 DO YOU USE OR REFER TO PEAK RECURRENT FORWARD CURRENT
DIODE RATINGS
6402 G1-49 DO YOU USE OR REFER TO MAXIMUM SURGE CURRENT DIODE
RATINGS
6403 G1-50 DO YOU USE OR REFER TO PEAK REVERSE (INVERSE) VOLTAGE
DIODE RATINGS
6404 G2-01 DO YOU WORK WITH TRANSISTORS IN YOUR PRESENT JOB?
6405 G2-02 DO YOU INSPECT TRANSISTORS
6406 G2-03 DO YOU REMOVE OR REPLACE TRANSISTORS
6407 G2-04 DO YOU CHECK TRANSISTORS USING AN INSTRUMENT
AND REVERSE RESISTANCE MEASUREMENTS
6408 G2-05 DO YOU USE OR REFER TO Emitter - Base (EB) FORWARD
AND REVERSE RESISTANCE MEASUREMENTS
6409 G2-06 DO YOU USE OR REFER TO COLLECTOR - Base (CB) FORWARD
AND REVERSE RESISTANCE MEASUREMENTS
6410 G2-07 DO YOU USE OR REFER TO Emitter - Collector (EC)
RESISTANCE MEASUREMENTS

6411 G2-08 DO YOU USE OR REFER TO HOW BIASING AFFECTS THE
PHYSICAL BARRIER WIDTH OF THE Emitter - Base JUNCTION
6412 G2-09 DO YOU USE OR REFER TO HOW BIASING AFFECTS THE
PHYSICAL BARRIER WIDTH OF THE COLLECTOR - Base JUNCTION
6413 G2-10 DO YOU USE OR REFER TO THE PHYSICAL SIZE OF THE
TRANSISTOR STRUCTURE (COLLECTOR, BASE AND Emitter)
6414 G2-11 DO YOU USE OR REFER TO LEAKAGE CURRENT (ICBO) IN A
TRANSISTOR
6415 G2-12 DO YOU USE OR REFER TO TRANSISTOR SCHEMATIC SYMBOLS
6416 G2-13 DO YOU USE OR REFER TO TRANSISTOR NOTATION SUCH AS
Q1, Q2, Q3, ETC
6417 G2-14 DO YOU USE OR REFER TO TRANSISTOR SUBSTITUTION
INFORMATION
6418 G2-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT THE
TRANSISTOR BASE CURRENT IS NORMALLY SIGNIFICANTLY
SMALLER THAN THE Emitter CURRENT IE (USUALLY 10 BEING 2 TO
8 PERCENT OF IE)
6419 G2-16 DO YOU USE THE INFORMATION THAT THE EFFECT OF Emitter
BASE VOLTAGE ON BASE CURRENT IS THE CONTROLLING FACTOR FOR
TRANSISTORS
6420 G2-17 DO YOU USE THE GENERAL RULE THAT LEAKAGE CURRENT
ICBO IN A TRANSISTOR INCREASES AS TEMPERATURE INCREASES
6421 G2-18 DO YOU USE OR REFER TO TRANSISTOR CHARACTERISTIC
CURVES
6422 G2-19 DO YOU USE OR REFER TO GATE TRANSISTOR GAINS

G423 G2-24 DO YOU USE OR REFER TO ALPHA TRANSISTOR GAINS
 G424 G2-21 DO YOU USE OR REFER TO GAMMA TRANSISTOR GAINS
 G425 G2-22 DO YOU CALCULATE RETA TRANSISTOR GAINS
 G426 G2-23 DO YOU CALCULATE ALPHA TRANSISTOR GAINS
 G427 G2-24 DO YOU CALCULATE GAMMA TRANSISTOR GAINS
 G428 G3-01 DO YOU WORK WITH TRANSISTOR AMPLIFIERS IN YOUR PRESENT JOB
 G429 G3-02 DO YOU INSPECT TRANSISTOR AMPLIFIERS
 G430 G3-03 DO YOU ALIGN OR ADJUST TRANSISTOR AMPLIFIERS
 G431 G3-04 DO YOU TROUBLESHOOT TO THE AMPLIFIER CIRCUIT LEVEL
 G432 G3-05 DO YOU TROUBLESHOOT TO AMPLIFIER COMPONENTS
 G433 G3-06 DO YOU REMOVE OR REPLACE THE COMPLETE AMPLIFIER
 G434 G3-07 DO YOU REMOVE OR REPLACE AMPLIFIER COMPONENTS
 G435 G3-08 DO YOU USE OR REFER TO (COMMON Emitter) THE CHANGE IN COLLECTOR CURRENT WHICH RESULTS FROM A CHANGE IN BASE CURRENT
 G436 G3-09 DO YOU USE OR REFER TO (COMMON Emitter) THE CALCULATIONS NECESSARY TO MEASURE THE SPECIFIC CHANGE IN COLLECTOR CURRENT WHICH RESULTS FROM A SPECIFIC CHANGE IN BASE CURRENT
 G438 G3-11 DO YOU USE OR REFER TO (COMMON Emitter) THE CALCULATIONS NECESSARY TO MEASURE THE SPECIFIC CHANGE IN COLLECTOR VOLTAGE WHICH RESULTS FROM A SPECIFIC CHANGE IN BASE CURRENT
 G439 G3-12 DO YOU USE OR REFER TO (COMMON Emitter) THE CHANGE IN BASE CURRENT WHICH RESULTS FROM AN INPUT SIGNAL
 G440 G3-13 DO YOU USE OR REFER TO (COMMON Emitter) THE CALCULATIONS NECESSARY TO MEASURE THE SPECIFIC CHANGE IN BASE CURRENT WHICH RESULTS FROM A SPECIFIC INPUT SIGNAL
 G441 G3-14 DO YOU USE THE LOAD-LINE METHOD OF ANALYSIS IN YOUR CIRCUIT ANALYSIS (THIS METHOD REQUIRES YOU TO PLOT A LOAD-LINE ON A TRANSISTOR CHARACTERISTIC CURVE)
 G442 G3-15 DO YOU USE OR REFER TO THE OPERATING POINT Q (QUIESCENT POINT) FOR A TRANSISTOR
 G443 G3-16 DO YOU CALCULATE THE SPECIFIC QUIESCENT POINT FOR A PARTICULAR TRANSISTOR
 G444 G3-17 DO YOU MEASURE VOLTAGE GAIN USED IN THE COMMON Emitter CONFIGURATION
 G445 G3-18 DO YOU MEASURE CURRENT GAIN USED IN THE COMMON Emitter CONFIGURATION
 G446 G3-19 DO YOU MEASURE POWER GAIN USED IN THE COMMON Emitter CONFIGURATION
 G447 G3-20 DO YOU CALCULATE THE VOLTAGE GAIN FOR SPECIFIC TRANSISTORS USING A FORMULA THAT IS, DO YOU DIVIDE THE CHANGE IN BASE-EMITTER VOLTAGE INTO THE CHANGE THE BASE COLLECTOR VOLTAGE TO DETERMINE THE VOLTAGE GAIN
 G448 G3-21 DO YOU CALCULATE THE CURRENT GAIN FOR SPECIFIC TRANSISTORS USING A FORMULA THAT IS, DO YOU DIVIDE THE CHANGE IN BASE CURRENT INTO THE CHANGE IN COLLECTOR CURRENT TO DETERMINE THE VOLTAGE GAIN
 G449 G3-22 DO YOU CALCULATE THE POWER GAIN FOR A SPECIFIC TRANSISTOR USING A FORMULA THAT IS, DO YOU MULTIPLY THE CURRENT GAIN TIMES THE VOLTAGE GAIN TO DETERMINE THE POWER GAIN
 G450 G3-23 DO YOU NEED TO KNOW THAT MORE COLLECTOR CURRENT IS GENERATED WITH LESS COLLECTOR VOLTAGE AS TEMPERATURE INCREASES (THIS AFFECTS THE STATIC OPERATING POINT [Q]) OF THE TRANSISTOR
 G451 G3-24 DO YOU COMPUTE THE STATIC OPERATING POINT [Q] OF A TRANSISTOR AT DIFFERENT TEMPERATURES
 G452 G3-25 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH THERMISTOR STABILIZATION
 G453 G3-26 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH SELF-BIAS STABILIZATION
 G454 G3-27 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH FORWARD BIAS DIODE STABILIZATION
 G455 G3-28 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH REVERSE BIAS DIODE STABILIZATION
 G456 G3-29 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH DOUBLE DIODE STABILIZATION
 G457 G3-30 DO YOU IDENTIFY ON SCHEMATIC DIAGRAMS AND RELATE TO THE ACTUAL CIRCUITRY THE COMPONENTS ASSOCIATED WITH FORWARD BIAS DIODE STABILIZATION
 G458 G3-31 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM Emitter (SWAMPING) RESISTOR STABILIZATION
 G459 G3-32 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM SELF-BIAS STABILIZATION
 G460 G3-33 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM THERMISTOR STABILIZATION
 G461 G3-34 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM FORWARD BIAS DIODE STABILIZATION
 G462 G3-35 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM REVERSE BIAS DIODE STABILIZATION
 G463 G3-36 DO YOU TROUBLESHOOT CIRCUITS WHICH HAVE COMPONENTS WHICH PERFORM DOUBLE DIODE STABILIZATION
 G464 G3-37 DO YOU IDENTIFY AMPLITUDE DISTORTION FOR TRANSISTOR CIRCUITS
 G465 G3-38 DO YOU TROUBLESHOOT TRANSISTOR CIRCUITS TO FIND THE CAUSES OF AMPLITUDE DISTORTION
 G466 G3-39 DO YOU IDENTIFY FREQUENCY DISTORTION FOR TRANSISTOR CIRCUITS
 G467 G3-40 DO YOU IDENTIFY PHASE DISTORTION FOR TRANSISTOR CIRCUITS
 G468 G3-41 DO YOU TROUBLESHOOT TRANSISTOR CIRCUITS TO FIND THE CAUSES OF PHASE DISTORTION
 G469 G3-42 DO YOU TROUBLESHOOT TRANSISTOR CIRCUITS TO FIND THE

CAUSES OF FREQUENCY DISTORTION
G470 G3-43 DO YOU NEED TO KNOW THE DEGENERATIVE EFFECTS ON THE
CIRCUIT CAUSED BY CHANGING Emitter RESISTANCE FOR
TRANSISTOR AMPLIFIERS IN THE COMMON COLLECTOR
CONFIGURATION

G471 G3-44 DO YOU DETERMINE THE CLASS OF OPERATION FOR
AMPLIFIERS IN ORDER TO TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS
G472 G3-45 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL AMPLIFIERS
G473 G3-46 DO YOU TROUBLESHOOT OR REPAIR COMPLEMENTARY SYMMETRY
G474 G3-47 DO YOU TROUBLESHOOT OR REPAIR COMPLEMENTARY SYMMETRY
CIRCUITS

G475 G3-48 DO YOU TROUBLESHOOT OR REPAIR COMPOUND-CONNECTED
AMPLIFIERS

G476 G3-49 DO YOU TROUBLESHOOT OR REPAIR CASCADE-CONNECTED
AMPLIFIERS

H SOLID STATE SPECIAL PURPOSE DEVICES, POWER
SUPPLIES, AND OSCILLATORS

H477 H1-01 DO YOU USE OR REFER TO VARACTORS

H478 H1-02 DO YOU USE OR REFER TO TUNNEL DIODES

H479 H1-03 DO YOU USE OR REFER TO FIELD-EFFECT TRANSISTORS (FET)

H480 H1-04 DO YOU USE OR REFER TO UNIJUNCTION TRANSISTORS

H481 H1-05 DO YOU USE OR REFER TO ZENER DIODES

H482 H1-06 DO YOU USE OR REFER TO INTEGRATED CIRCUITS

H483 H2-01 IN YOUR PRESENT JOB, DO YOU WORK WITH POWER SUPPLIES

H484 H2-02 DO YOU INSPECT POWER SUPPLIES

H485 H2-03 DO YOU CLEAN POWER SUPPLIES

H486 H2-04 DO YOU ALIGN OR ADJUST POWER SUPPLIES

H487 H2-05 DO YOU TROUBLESHOOT TO POWER SUPPLY CIRCUIT LEVEL

H488 H2-06 DO YOU TROUBLESHOOT TO POWER SUPPLY COMPONENTS

H489 H2-07 DO YOU REMOVE OR REPLACE POWER SUPPLY COMPONENTS

H490 H2-08 DO YOU REMOVE OR REPLACE POWER SUPPLY COMPONENTS

H491 H2-09 DO YOU WORK WITH HALF-WAVE RECTIFIERS

H492 H2-10 DO YOU WORK WITH FULL-WAVE RECTIFIERS OTHER THAN
BRIDGE RECTIFIERS

H493 H2-11 DO YOU WORK WITH BRIDGE RECTIFIERS

H494 H2-12 DO YOU WORK WITH THREE-PHASE RECTIFIERS

H495 H2-13 DO YOU USE OR REFER TO INPUT VOLTAGE

H496 H2-14 DO YOU USE OR REFER TO INPUT FREQUENCY

H497 H2-15 DO YOU USE OR REFER TO PEAK OUTPUT VOLTAGE

H498 H2-16 DO YOU USE OR REFER TO AVERAGE OUTPUT VOLTAGE

H499 H2-17 DO YOU USE OR REFER TO RIPPLE AMPLITUDE

H500 H2-18 DO YOU USE OR REFER TO RIPPLE FREQUENCY

H501 H2-19 DO YOU USE OR REFER TO PEAK REVERSE (INVERSE) VOLTAGE

H502 H2-20 DO YOU USE OR REFER TO SHAPE OF OUTPUT WAVEFORMS

H503 H2-21 DO YOU USE OR REFER TO EFFECTIVE OUTPUT VOLTAGE

H504 H2-22 DO YOU WORK WITH CIRCUITS WHICH EMPLOY CAPACITIVE
FILTERS

H505 H2-23 DO YOU WORK WITH CIRCUITS WHICH EMPLOY INDUCTIVE
FILTERS

H506 H2-24 DO YOU WORK WITH CIRCUITS WHICH EMPLOY CAPACITIVE

INPUT L-TYPE FILTERS
G470 H2-25 DO YOU WORK WITH CIRCUITS WHICH EMPLOY INDUCTIVE
INPUT L-TYPE FILTERS

H507 H2-26 DO YOU WORK WITH CIRCUITS WHICH EMPLOY LC PI-TYPE
FILTERS

H509 H2-27 DO YOU WORK WITH CIRCUITS WHICH EMPLOY RC PI-TYPE
FILTERS

H510 H2-28 DO YOU WORK WITH CIRCUITS WHICH EMPLOY DON'T
REMEMBER WHICH TYPE OF FILTER

H511 H2-29 DO YOU HAVE THE OPTION OF REPLACING ONE TYPE OF
FILTER WITH A DIFFERENT TYPE FILTER

H512 H3-01 DO YOU WORK WITH OSCILLATORS IN YOUR PRESENT JOB
H513 H3-02 DO YOU INSPECT OSCILLATORS

H514 H3-03 DO YOU ALIGN OR ADJUST OSCILLATORS

H515 H3-04 DO YOU REMOVE OR REPLACE COMPLETE OSCILLATORS

H516 H3-05 DO YOU REMOVE OR REPLACE OSCILLATOR COMPONENTS

H517 H3-06 DO YOU TROUBLESHOOT TO OSCILLATOR CIRCUIT LEVEL

H518 H3-07 DO YOU TROUBLESHOOT TO OSCILLATOR COMPONENTS

H519 H3-08 DO YOU USE OR REFER TO FEEDBACK

H520 H3-09 DO YOU USE OR REFER TO FREQUENCY DETERMINING DEVICES
(FDD)

H521 H3-10 DO YOU USE OR REFER TO AMPLITUDE STABILITY

H522 H3-11 DO YOU USE OR REFER TO FREQUENCY STABILITY

H523 H3-12 DO YOU USE OR REFER TO DAMPING

H524 H3-13 DO YOU USE OR REFER TO REGENERATIVE FEEDBACK

H525 H3-14 DO YOU USE OR REFER TO PIEZOELECTRIC EFFECT

H526 H3-15 DO YOU USE OR REFER TO CRITICAL DAMPING

H527 H3-16 DO YOU USE OR REFER TO UNDER DAMPING

H528 H3-17 DO YOU USE OR REFER TO OVER DAMPING

H529 H3-18 DO YOU WORK WITH OSCILLATORS WHICH USE LC TANK
CIRCUITS AS FDD

H530 H3-19 DO YOU WORK WITH OSCILLATORS WHICH USE RC NETWORKS AS
FDD

H531 H3-20 DO YOU WORK WITH OSCILLATORS WHICH USE CRYSTALS AS
FDD

H532 H3-21 DO YOU WORK WITH OSCILLATORS WHICH USE DON'T REMEMBER
WHICH TYPE OF FDD

H533 H3-22 DO YOU WORK WITH SERIES HARTLEY SINUSOIDAL
OSCILLATORS

H534 H3-23 DO YOU WORK WITH SHUNT HARTLEY SINUSOIDAL OSCILLATORS

H535 H3-24 DO YOU WORK WITH COLPITT'S SINUSOIDAL OSCILLATORS

H536 H3-25 DO YOU WORK WITH CLAPP SINUSOIDAL OSCILLATORS

H537 H3-26 DO YOU WORK WITH BUTLER SINUSOIDAL OSCILLATORS

H538 H3-27 DO YOU WORK WITH DON'T REMEMBER WHICH TYPE OF
OSCILLATORS

H539 H3-01 DO YOU WORK WITH MULTIVIBRATORS IN YOUR PRESENT JOB

H540 H3-02 DO YOU INSPECT WAVE GENERATING OR SHAPING CIRCUITS

H541 H3-03 DO YOU ALIGN OR ADJUST WAVE GENERATING OR SHAPING
CIRCUITS

1542 11-4 DO YOU CALIBRATE, MAKE GENERATING OR SHAPING CIRCUITS
1543 11-5 DO YOU TROUBLESHOOT TO MAKE GENERATING OR SHAPING
CIRCUITS

1544 11-6 DO YOU TROUBLESHOOT TO MAKE GENERATING OR SHAPING
CIRCUIT COMPONENTS

1545 11-7 DO YOU REMOVE OR REPLACE COMPLETE WAVE GENERATING OR
SHAPING CIRCUITS

1546 11-8 DO YOU REMOVE OR REPLACE WAVE GENERATING OR SHAPING
COMPONENTS

1547 11-9 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN LC TANK
CIRCUITS

1548 11-10 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN RC
NETWORKS

1549 11-11 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN
CRYSTALS

1550 11-12 DO YOU WORK WITH MULTIVIBRATORS WHICH CONTAIN DON'T
REMEMBER WHICH TYPE OF FDD

1551 11-13 DO YOU WORK WITH A STABLE MULTIVIBRATORS

1552 11-14 DO YOU WORK WITH MONOSTABLE MULTIVIBRATORS

1553 11-15 DO YOU WORK WITH BISTABLE MULTIVIBRATORS

1554 11-16 DO YOU WORK WITH MULTIVIBRATORS WHICH DON'T REMEMBER WHICH TYPE
MULTIVIBRATORS

1555 12-1 DO YOU WORK WITH LIMITERS OR CLAMPERS IN YOUR
PRESENT JOB

1556 12-2 DO YOU WORK WITH SERIES DIODE LIMITERS

1557 12-3 DO YOU WORK WITH SHUNT DIODE LIMITERS

1558 12-4 DO YOU WORK WITH LIMITERS WITH BIAS

1559 12-5 DO YOU WORK WITH ZENER DIODE LIMITERS

1560 12-6 DO YOU WORK WITH TRANSISTOR LIMITERS

1561 12-7 DO YOU WORK WITH BASIC DIODE CLAMPING CIRCUITS

1562 12-8 DO YOU WORK WITH BASIC DIODE CLAMPING CIRCUITS WITH BIAS

1563 12-9 DO YOU WORK WITH DIODE CLAMPING CIRCUITS WITH BIAS

1564 12-10 DO YOU WORK WITH DON'T KNOW WHICH TYPE OF CLAMPING
CIRCUIT

1565 13-1 IN YOUR PRESENT JOB, DO YOU WORK ON EQUIPMENT WHICH
CONTAINS ELECTRON TUBES

1566 13-2 DO YOU CHECK ELECTRON TUBES TO SEE IF THEY ARE GOOD

1567 13-3 DO YOU USE TUBE TESTERS TO CHECK ELECTRON TUBES

1568 13-4 DO YOU USE MULTIMETERS TO CHECK ELECTRON TUBES

1569 13-5 DO YOU USE SCOPES TO CHECK ELECTRON TUBES

1570 13-6 DO YOU USE SUBSTITUTION TO CHECK ELECTRON TUBES

1571 13-7 DO YOU USE OR REFER TO CUTOFF VOLTAGE RATING

1572 13-8 DO YOU USE OR REFER TO PEAK INVERSE VOLTAGE RATING

1573 13-9 DO YOU USE OR REFER TO PEAK CURRENT RATING

1574 13-10 DO YOU USE OR REFER TO TRANSIT TIME

1575 13-11 DO YOU USE OR REFER TO PLATE DISSIPATION RATING

1576 13-12 DO YOU USE OR REFER TO SATURATION

1577 13-13 DO YOU USE OR REFER TO DC PLATE RESISTANCE

1578 13-14 DO YOU COMPUTE ACTUAL VALUES OF THE DC PLATE
RESISTANCE FOR ELECTRON TUBES

1579 13-15 DO YOU USE OR REFER TO PLATE VOLTAGE

1580 13-16 DO YOU USE OR REFER TO PLATE CURRENT

1581 13-17 DO YOU USE OR REFER TO GRID VOLTAGE

1582 13-18 DO YOU USE OR REFER TO GRID CURRENT

1583 13-19 DO YOU USE OR REFER TO CATHODE VOLTAGE

1584 13-20 DO YOU USE OR REFER TO CATHODE CURRENT

1585 13-21 DO YOU USE OR REFER TO THE TRIODE AMPLIFICATION
FACTOR (THE AMPLIFICATION FACTOR FOR TRIODES IS DEFINED AS
THE RATIO OF CHANGE IN PLATE VOLTAGE TO A CHANGE IN GRID
VOLTAGE)

1586 13-22 DO YOU CALCULATE ACTUAL VALUES OF TRIODE
AMPLIFICATION FACTORS

1587 13-23 DO YOU USE OR REFER TO MULTIGRID (TETRODE, PENTODE,
ETC) AMPLIFICATION FACTORS

1588 13-24 DO YOU USE OR REFER TO ELECTRON TUBE TRANSCONDUCTANCE
(G, WHICH IS MEASURED IN MHOS)

1589 13-25 DO YOU CALCULATE ACTUAL VALUES OF ELECTRON TUBE
TRANSCONDUCTANCES

1590 13-26 DO YOU USE OR REFER TO THE ELECTRON TUBE PARAMETER
CALLED AC PLATE RESISTANCE

1591 13-27 DO YOU CALCULATE ACTUAL VALUES OF AC PLATE
RESISTANCE

1592 13-28 DO YOU USE OR REFER TO ELECTRON TUBE INTERELECTRODE
CAPACITANCE

1593 13-29 DO YOU USE OR REFER TO CHARACTERISTIC CURVES IN YOUR
WORK WITH ELECTRON TUBES

1594 13-30 DO YOU USE CHARACTERISTIC CURVES TO SELECT PLATE
VOLTAGE FOR A SPECIFIED BIAS

1595 13-31 DO YOU USE CHARACTERISTIC CURVES TO SELECT PLATE
CURRENT FOR A SPECIFIED BIAS

1596 13-32 DO YOU USE CHARACTERISTIC CURVES TO SELECT BIAS
REQUIRED FOR CUTOFF

1597 13-33 DO YOU USE CHARACTERISTIC CURVES TO SELECT BIAS
REQUIRED FOR SATURATION

1598 13-34 DO YOU USE OR REFER TO ELECTRON TUBE AMPLIFIER GAIN

1599 13-35 DO YOU USE OR REFER TO ELECTRON TUBE AMPLIFIER
EFFICIENCY

1600 13-36 DO YOU USE TEST TUBE CHECKERS TO DETERMINE ELECTRON
TUBE AMPLIFIER GAIN

1601 13-37 DO YOU USE MULTIMETERS TO DETERMINE ELECTRON TUBE
AMPLIFIER GAIN

1602 13-38 DO YOU USE OSCILLOSCOPES TO DETERMINE ELECTRON TUBE
AMPLIFIER GAIN

1603 13-39 DO YOU USE CHARACTERISTIC CURVES TO DETERMINE
ELECTRON TUBE AMPLIFIER GAIN

1604 13-40 DO YOU CALCULATE ANY ELECTRON TUBE CAPACITANCES SUCH
AS INPUT CAPACITANCE

1605 13-41 DO YOU USE OR REFER TO TUBE SOCKET NOTATION

1606 13-42 DO YOU USE OR REFER TO PIN NUMBERING SYSTEMS

1607 13-43 DO YOU USE OR REFER TO THE TYPE OF MATERIAL OR THE
OPERATING TEMPERATURE OF THE EMITTING SURFACE IN THE
ELECTRON TUBES YOU WORK ON

1608 13-44 DO YOU USE OR REFER TO TUBE SUBSTITUTION MATERIAL
SUCH AS MANUALS OR CHARTS

J ELECTRON TUBE AMPLIFIERS AND CIRCUITS, SPECIAL
PURPOSE ELECTRON TUBES, HETERODYNING, MODULATION,

K AM SYSTEMS, FM SYSTEMS, AND NUMBERING SYSTEMS	
J609 J1-01 DO YOU WORK WITH ELECTRON TUBE AMPLIFIERS OR CIRCUITS IN YOUR PRESENT JOB	K638 K1-01 DO YOU WORK ON AM TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB
J610 J1-02 DO YOU DETERMINE THE CLASS OF OPERATION FOR ELECTRON TUBE AMPLIFIERS IN ORDER TO TROUBLESHOOT AMPLIFIER CIRCUITS	K639 K1-02 DO YOU INSPECT AM TRANSMIT OR RECEIVE SYSTEMS
J611 J1-03 DO YOU TROUBLESHOOT OR REPAIR PARAPHASE AMPLIFIERS	K640 K1-03 DO YOU CLEAN AM TRANSMIT OR RECEIVE SYSTEMS
J612 J1-04 DO YOU TROUBLESHOOT OR REPAIR PUSH-PULL AMPLIFIERS	K641 K1-04 DO YOU ALIGN OR ADJUST AM TRANSMIT OR RECEIVE SYSTEMS
J613 J1-05 DO YOU TROUBLESHOOT OR REPAIR COMPOUND-CONNECTED AMPLIFIERS	K642 K1-05 DO YOU TROUBLESHOOT TO AM TRANSMIT OR RECEIVE SYSTEMS
J614 J1-06 DO YOU TROUBLESHOOT OR REPAIR CASCADE-CONNECTED AMPLIFIERS	K643 K1-06 DO YOU TROUBLESHOOT TO AM TRANSMIT OR RECEIVE SYSTEMS
J615 J1-07 DO YOU TROUBLESHOOT OR REPAIR DON'T KNOW WHICH TYPE OF AMPLIFIER	K644 K1-07 DO YOU REMOVE OR REPLACE AM TRANSMIT OR RECEIVE SYSTEMS
J616 J2-01 DO YOU WORK WITH GAS TUBES (NOT CATHODE OR CATHODE-RAY TUBES)	K645 K1-08 DO YOU REMOVE OR REPLACE AM TRANSMIT OR RECEIVE SYSTEMS
J617 J2-02 DO YOU WORK WITH CATHODE-RAY TUBES	K646 K1-09 DO YOU PERFORM TASKS ON RF OSCILLATORS
J618 J2-03 DO YOU USE OR REFER TO THE CHARACTERISTICS OF BEAM POWER TUBES	K647 K1-10 DO YOU PERFORM TASKS ON RF AMPLIFIERS
J619 J2-04 DO YOU TROUBLESHOOT OR REPAIR CIRCUITS IN WHICH BEAM POWER TUBES ARE USED	K648 K1-11 DO YOU PERFORM TASKS ON AUDIO AMPLIFIERS
J620 J2-05 DO YOU USE OR REFER TO THE CHARACTERISTICS OF THYRATRONS	K649 K1-12 DO YOU PERFORM TASKS ON POWER AMPLIFIERS
J621 J2-06 DO YOU TROUBLESHOOT OR REPAIR CIRCUITS IN WHICH THYRATRONS ARE USED	K650 K1-13 DO YOU PERFORM TASKS ON LOCAL OSCILLATORS
J622 J2-07 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTRON GUNS OF CATHODE-RAY TUBES (CRT)	K651 K1-14 DO YOU PERFORM TASKS ON AMPLIFIERS
J623 J2-08 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTROMAGNETIC DEFLECTION SYSTEMS OF CATHODE-RAY TUBES (CRT)	K652 K1-15 DO YOU PERFORM TASKS ON DETECTORS
J624 J2-09 DO YOU USE OR REFER TO THE PRINCIPLES OF OPERATION OF ELECTROSTATIC DEFLECTION SYSTEMS OF CATHODE-RAY TUBES (CRT)	K653 K1-16 DO YOU PERFORM TASKS ON DON'T REMEMBER WHICH AM STAGE TRANSMITTERS
J625 J2-10 DO YOU USE OR REFER TO PHOSPHOR SCREENS	K654 K1-17 DO YOU USE OR REFER TO AMPLITUDE STABILIZATION IN TRANSMITTERS
J626 J2-11 DO YOU USE OR REFER TO AQUADAG COATINGS	K655 K1-18 DO YOU USE OR REFER TO FREQUENCY STABILIZATION IN TRANSMITTERS
J627 J2-12 DO YOU USE OR REFER TO ELECTRON OPTICS	K656 K1-19 DO YOU USE OR REFER TO SENSITIVITY OF RECEIVERS
J628 J2-13 DO YOU USE OR REFER TO PERSISTENCE	K657 K1-20 DO YOU USE OR REFER TO SELECTIVITY OF RECEIVERS
J629 J2-14 DO YOU USE OR REFER TO FLUORESCENCE	K658 K1-21 DO YOU USE OR REFER TO 2ND HARMONIC DISTORTION
J630 J2-15 DO YOU USE OR REFER TO PHOSPHORESCENCE	K659 K1-22 DO YOU USE OR REFER TO BANDPASS DISTORTION
J631 J2-16 DO YOU WORK ON TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB	K660 K1-23 DO YOU USE OR REFER TO SQUARE LAW DISTORTION
J632 J3-01 DO YOU WORK ON TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB	K661 K1-24 DO YOU USE OR REFER TO CO-CHANNEL INTERFERENCE
J633 J3-02 DO YOU PERFORM TASKS ON FREQUENCY CONVERTERS	K662 K1-25 DO YOU USE OR REFER TO IMAGE FREQUENCIES IN RECEIVERS
J634 J3-03 DO YOU PERFORM TASKS ON FREQUENCY MIXERS	K663 K1-26 DO YOU USE OR REFER TO IMAGE RATIOS OR IMAGE REJECTION RATIOS
J635 J3-04 DO YOU USE OR REFER TO THE HETERODYNING OF SIGNALS IN YOUR WORK WITH TRANSMIT OR RECEIVE SYSTEMS	K664 K1-27 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH AM TRANSMITTER SCHEMATIC DIAGRAMS
J636 J3-05 DO YOU PERFORM TASKS ON REACTANCE MODULATORS	K665 K1-28 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH AM RECEIVER SCHEMATIC DIAGRAMS
J637 J3-06 DO YOU PERFORM TASKS ON MODULATED OSCILLATORS	K666 K2-01 DO YOU WORK WITH FM TRANSMIT OR RECEIVE SYSTEMS IN YOUR PRESENT JOB
	K667 K2-02 DO YOU INSPECT FM TRANSMIT OR RECEIVE SYSTEMS
	K668 K2-03 DO YOU CLEAN FM TRANSMIT OR RECEIVE SYSTEMS
	K669 K2-04 DO YOU ALIGN FM TRANSMIT OR RECEIVE SYSTEMS
	K670 K2-05 DO YOU TROUBLESHOOT TO FM TRANSMIT OR RECEIVE SYSTEMS
	K671 K2-06 DO YOU TROUBLESHOOT TO FM TRANSMIT OR RECEIVE SYSTEMS
	K672 K2-07 DO YOU REMOVE OR REPLACE FM TRANSMIT OR RECEIVE SYSTEMS
	K673 K2-08 DO YOU REMOVE OR REPLACE FM TRANSMIT OR RECEIVE SYSTEMS

K674 K-2-0-9 DO YOU PERFORM TASKS ON AUDIO AMPLIFIERS
 K675 K-2-10 DO YOU PERFORM TASKS ON FREQUENCY MULTIPLIERS
 K676 K-2-11 DO YOU PERFORM TASKS ON DRIVERS (INTERMEDIATE
 AMPLIFIERS)
 K677 K-2-12 DO YOU PERFORM TASKS ON POWER AMPLIFIERS
 K678 K-2-13 DO YOU PERFORM TASKS ON RF AMPLIFIERS
 K679 K-2-14 DO YOU PERFORM TASKS ON FREQUENCY CONVERTERS
 K680 K-2-15 DO YOU PERFORM TASKS ON IF AMPLIFIERS
 K681 K-2-16 DO YOU PERFORM TASKS ON LIMITERS
 K682 K-2-17 DO YOU PERFORM TASKS ON FREQUENCY DISCRIMINATORS
 K683 K-2-18 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH
 SCHEMATIC DIAGRAMS OF FM TRANSMITTERS
 K684 K-2-19 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH
 SCHEMATIC DIAGRAMS OF FM RECEIVERS
 K685 K-3-0-1 DO YOU CONVERT DECIMAL (BASE 10) NUMBERS TO OCTAL
 BASE 8, NUMBERS
 K686 K-3-0-2 DO YOU CONVERT DECIMAL NUMBERS TO BINARY (BASE 2)
 NUMBERS
 K687 K-3-0-3 DO YOU CONVERT OCTAL NUMBERS TO DECIMAL NUMBERS
 K688 K-3-0-4 DO YOU CONVERT OCTAL NUMBERS TO BINARY NUMBERS
 K689 K-3-0-5 DO YOU CONVERT BINARY NUMBERS TO DECIMAL NUMBERS
 K690 K-3-0-6 DO YOU CONVERT BINARY NUMBERS TO OCTAL NUMBERS
 K691 K-3-0-7 DO YOU ADD BINARY NUMBERS TO GET A SUM
 K692 K-3-0-8 DO YOU SUBTRACT BINARY NUMBERS USING THE DIRECT
 CARRY METHOD
 K693 K-3-0-9 DO YOU SUBTRACT BINARY NUMBERS USING THE DIRECT
 SUBTRACTION METHOD
 K694 K-3-10 DO YOU ADD OCTAL NUMBERS TO GET A SUM

L LOGIC FUNCTIONS, BOOLEAN EQUATIONS, AND COUNTERS
 L695 L-0-1 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS
 RELATING TO LOGIC FUNCTIONS

L696 L-0-2 DO YOU CONSTRUCT TRUTH TABLES FOR AND LOGIC SYMBOLS
 OR GATES
 L697 L-0-3 DO YOU CONSTRUCT TRUTH TABLES FOR OR LOGIC SYMBOLS
 OR GATES
 L698 L-0-4 DO YOU CONSTRUCT TRUTH TABLES FOR AND OR OR LOGIC
 SYMBOLS WITH STATE INDICATORS
 L699 L-0-5 DO YOU CONSTRUCT TRUTH TABLES FOR EXCLUSIVE OR LOGIC
 SYMBOLS OR GATES
 L700 L-0-6 DO YOU USE OR REFER TO TRUTH TABLES FOR AND LOGIC
 SYMBOLS OR GATES
 L701 L-0-7 DO YOU USE OR REFER TO TRUTH TABLES FOR OR LOGIC
 SYMBOLS OR GATES
 L702 L-0-8 DO YOU USE OR REFER TO TRUTH TABLES FOR AND OR OR
 LOGIC SYMBOLS WITH STATE INDICATORS

L703 L-0-9 DO YOU USE OR REFER TO TRUTH TABLES FOR EXCLUSIVE OR
 LOGIC SYMBOLS
 L704 L-1-0 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR AND GATES
 L705 L-1-1 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR OR GATES
 L706 L-1-2 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR NAND OR NOR

L707 L-1-3 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR EXCLUSIVE
 OR GATES
 L708 L-2-0-1 IN YOUR PRESENT JOB, DO YOU PERFORM ANY TASKS
 RELATING TO BOOLEAN EQUATIONS, LOGIC DIAGRAMS, OR LOGIC
 CIRCUITS
 L709 L-2-0-2 DO YOU DRAW LOGIC SYMBOLS FOR DIRECT COUPLED
 TRANSISTOR LOGIC (DCTL) CIRCUITS
 L710 L-2-0-3 DO YOU CONSTRUCT TRUTH TABLES FOR CURRENT NODE LOGIC
 (CNL) CIRCUITS
 L711 L-2-0-4 DO YOU DRAW LOGIC DIAGRAMS FROM GIVEN BOOLEAN
 EQUATIONS
 L712 L-2-0-5 DO YOU MEASURE INPUTS OR OUTPUTS OF LOGIC GATES
 L713 L-2-0-6 DO YOU DEVELOP OR ANALYZE BOOLEAN EQUATIONS IN THE
 PROCESS OF TROUBLESHOOTING DIGITAL CIRCUITS
 L714 L-2-0-7 DO YOU ANALYZE LOGIC CIRCUITS BY USING BOOLEAN
 ALGEBRA
 L715 L-2-0-8 DO YOU USE OR REFER TO LOGIC SYMBOLS FOR DIRECT
 COUPLED TRANSISTOR LOGIC (DCTL) CIRCUIT GATES
 L716 L-2-0-9 DO YOU USE OR REFER TO TRUTH TABLES FOR CURRENT NODE
 LOGIC (CNL) CIRCUITS
 L717 L-2-1-0 DO YOU USE OR REFER TO LOGIC DIAGRAMS CONSISTING OF
 MORE THAN ONE GATE
 L718 L-2-1-1 DO YOU COMPUTE SUM AND CARRY EXPRESSIONS FOR SERIAL
 HALF OR FULL ADDER LOGIC DIAGRAMS
 L719 L-2-1-2 DO YOU TRACE DATA FLOW THROUGH PARALLEL FULL ADDER
 LOGIC DIAGRAMS
 L720 L-2-1-3 DO YOU WORK WITH ASYMMETRIC (FREE-RUNNING)
 MULTIVIBRATORS
 L721 L-2-1-4 DO YOU WORK WITH BISTABLE (FLIP-FLOP) MULTIVIBRATORS
 L722 L-2-1-5 DO YOU WORK WITH MONOSTABLE (ONE-SHOT)
 MULTIVIBRATORS
 L723 L-2-1-6 DO YOU USE OR REFER TO FLIP-FLOP MULTIVIBRATOR
 SYMBOLS
 L724 L-2-1-7 DO YOU USE OR REFER TO SINGLE-SHOT MULTIVIBRATOR
 SYMBOLS
 L725 L-2-1-8 DO YOU USE OR REFER TO FLIP-FLOP CIRCUIT DIAGRAMS
 L726 L-2-1-9 DO YOU USE OR REFER TO FLIP-FLOP TRUTH TABLES
 L727 L-2-2-0 DO YOU USE OR REFER TO COMPLEMENTED FLIP-FLOP
 LOGIC SYMBOLS
 L728 L-2-2-1 DO YOU USE OR REFER TO COMPLEMENTING FLIP-FLOP LOGIC
 SYMBOLS
 L729 L-2-2-2 DO YOU MEASURE OUTPUT WAVEFORMS OF LOGIC CIRCUITS
 L730 L-2-2-3 DO YOU TRACE DATA FLOW THROUGH COMPLEMENTED FLIP-FLOP
 SCHEMATIC DIAGRAMS
 L731 L-2-2-4 DO YOU TRACE DATA FLOW THROUGH COMPLEMENTING FLIP-
 FLOP SCHEMATIC DIAGRAMS
 L732 L-2-2-5 DO YOU CONSTRUCT TRUTH TABLES FOR JK FLIP-FLOP
 LOGIC SYMBOLS
 L733 L-3-0-1 DO YOU WORK WITH DIGITAL COUNTERS IN YOUR PRESENT JOB
 L734 L-3-0-2 DO YOU USE OR REFER TO UP-COUNTERS
 L735 L-3-0-3 DO YOU USE OR REFER TO DOWN-COUNTERS

L736 L3-04 DO YOU USE OR REFER TO SERIAL COUNTERS	M765 M1-09 DO YOU USE OR REFER TO ELECTRICAL LENGTH OF SAWTOOTH WAVEFORMS
L737 L3-05 DO YOU USE OR REFER TO PARALLEL COUNTERS	M766 M1-10 DO YOU USE OR REFER TO PHYSICAL LENGTH OF SAWTOOTH WAVEFORMS
L738 L3-06 DO YOU USE OR REFER TO RING COUNTERS	M767 M1-11 DO YOU USE OR REFER TO LINEAR SLOPE OF SAWTOOTH WAVEFORMS
L739 L3-07 DO YOU USE OR REFER TO DECADE COUNTERS	M768 M1-12 DO YOU USE OR REFER TO GATE LENGTH OF SAWTOOTH WAVEFORMS
L740 L3-08 DO YOU USE OR REFER TO COUNT DETECT CIRCUITS	M769 M2-01 DO YOU USE SIGNAL GENERATORS IN YOUR PRESENT JOB ADJUSTING, ALIGNING, OR CALIBRATING WHILE USING SIGNAL GENERATORS
L741 L3-09 DO YOU USE OR REFER TO DOWN CLOCKS	M770 M2-02 DO YOU PERFORM OPERATIONAL CHECKS WHILE USING SIGNAL GENERATORS
L742 L3-10 DO YOU USE OR REFER TO UP CLOCKS	
L743 L3-11 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF UP-COUNTERS HAVING COMPLEMENTED FLIP-FLOPS	
L744 L3-12 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF SERIAL UP- OR DOWN-COUNTERS HAVING COMPLEMENTING FLIP- FLOPS	
L745 L3-13 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF DECADE COUNTERS	M771 M2-03 DO YOU PERFORM PERIODIC MAINTENANCE SUCH AS ADJUSTING, ALIGNING, OR CALIBRATING WHILE USING SIGNAL GENERATORS
L746 L3-14 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF RING COUNTERS	M772 M2-04 DO YOU TROUBLESHOOT TO AN ASSEMBLY OR SUBASSEMBLY WHILE USING SIGNAL GENERATORS
L747 L3-15 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF SERIAL UP-COUNTERS FEEDING A PARALLEL STORAGE REGISTER	M773 M2-05 DO YOU TROUBLESHOOT TO THE SMALLEST REPLACEABLE COMPONENT WHILE USING SIGNAL GENERATORS
L748 L3-16 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF SHIFT REGISTERS	M774 M2-06 DO YOU USE AUDIO SINE-WAVE GENERATORS SUCH AS SQUARE WAVE, TRIANGLE, PULSE, OR SPIKE
L749 L3-17 DO YOU TRACE DATA FLOW THROUGH LOGIC DIAGRAMS OF OTHER TYPE OF COUNTERS	M775 M2-07 DO YOU USE AUDIO NON-SINUSOIDAL WAVE GENERATORS SUCH AS SQUARE WAVE, TRIANGLE, PULSE, OR SPIKE
L750 L3-18 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR UP-COUNTERS HAVING COMPLEMENTED FLIP-FLOPS	M776 M2-08 DO YOU USE RF GENERATORS LESS THAN 1,000 MHZ FOR OTHER SPECIAL PURPOSE OR MULTI-FUNCTION GENERATORS
L751 L3-19 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR SERIAL UP- OR DOWN-COUNTERS HAVING COMPLEMENT- ING FLIP-FLOPS	M777 M2-09 DO YOU USE RF GENERATORS GREATER THAN 1,000 MHZ FOR OTHER SPECIAL PURPOSE OR MULTI-FUNCTION GENERATORS
L752 L3-20 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR SERIAL UP-COUNTERS FEEDING A PARALLEL STORAGE REGISTERS	M778 M2-10 DO YOU USE OTHER SPECIAL PURPOSE OR MULTI-FUNCTION GENERATORS WITH ALTERNATING CURRENT OR DIRECT CURRENT MOTORS OR CONNECTIONS OF MOTORS
L753 L3-21 DO YOU COMPUTE THE BINARY COUNT AFTER SPECIFIC INPUT PULSES FOR OTHER TYPES OF COUNTERS	M779 M3-02 DO YOU INSPECT MOTORS CONNECTIONS OF MOTORS
L754 L3-22 DO YOU CONSTRUCT TRUTH TABLES FROM LOGIC DIAGRAMS OF DECADE COUNTERS	M780 M3-03 DO YOU CLEAN OR LUBRICATE MOTORS M781 M3-04 DO YOU OPERATE MOTORS M782 M3-05 DO YOU REMOVE OR REPLACE COMPLETE MOTORS M783 M3-06 DO YOU REMOVE OR REPLACE MOTOR PARTS M784 M3-07 DO YOU TROUBLESHOOT AS FAR AS CHECKING WIRE CONNECTIONS OF MOTORS
L755 L3-23 DO YOU DETERMINE THE STATE OF EACH FLIP-FLOP IN RING COUNTERS FOR SPECIFIC INPUT PULSES	M785 M3-08 DO YOU TROUBLESHOOT DOWN TO COMPONENT PARTS OF MOTORS M786 M3-09 DO YOU PERFORM ANY TASKS ON FIELD COILS M787 M3-10 DO YOU PERFORM ANY TASKS ON ARMATURES M788 M3-11 DO YOU PERFORM ANY TASKS ON ROTORS M789 M3-12 DO YOU PERFORM ANY TASKS ON BRUSHES M790 M3-13 DO YOU PERFORM ANY TASKS ON SLIP RINGS
L756 L3-24 DO YOU DETERMINE THE APPROPRIATE AND GATE NECESSARY IN COUNT DETECT CIRCUITS TO INDICATE A REQUIRED COUNT	M791 M3-14 DO YOU PERFORM ANY TASKS ON COMMUTATORS M792 M3-15 DO YOU PERFORM ANY TASKS ON POLE PIECES M793 M3-16 DO YOU DETERMINE OR MEASURE THE MAGNITUDE OF THE FORCE OR TORQUE CREATED BY A MOTOR
M TIMING CIRCUITS, USE OF SIGNAL GENERATORS, MOTORS, AND GENERATORS	M795 M3-17 DO YOU DETERMINE OR MEASURE THE DIRECTION OF THE MECHANICAL FORCE OR TORQUE CREATED BY A MOTOR
M757 M1-01 DO YOU WORK WITH SAWTOOTH WAVE GENERATORS	M796 M3-18 DO YOU DETERMINE OR MEASURE THE MAGNITUDE OR DIRECTION OF THE INDUCED VOLTAGE IN MOTORS
M758 M1-02 DO YOU WORK WITH TRAPEZOIDAL WAVE GENERATORS	M797 M3-19 DO YOU WORK WITH SYNCHRONOUS MOTORS
M759 M1-03 DO YOU WORK WITH PULSED OSCILLATORS WITH REGENERATIVE FEEDBACK	M798 M3-20 DO YOU WORK WITH INDUCTION MOTORS
M760 M1-04 DO YOU WORK WITH PULSED OSCILLATORS WITHOUT REGENERATIVE FEEDBACK	M799 M3-21 DO YOU WORK WITH SPLIT-PHASE MOTORS
M761 M1-05 DO YOU WORK WITH ALOCKING OSCILLATORS	
M762 M1-06 DO YOU USE OR REFER TO RISE TIME	
M763 M1-07 DO YOU USE OR REFER TO FALL OR FLYBACK TIME	
M764 M1-08 DO YOU USE OR REFER TO SWEET TIME	

N800 N3-22 DO YOU WORK WITH SOME COMBINATION OF THE ABOVE MOTORS
N801 N3-23 DO YOU INSPECT GENERATORS
N802 N3-24 DO YOU CLEAN OR LUBRICATE GENERATORS
N803 N3-25 DO YOU OPERATE GENERATORS
N804 N3-26 DO YOU REMOVE OR REPLACE COMPLETE GENERATORS
N805 N3-27 DO YOU REMOVE OR REPLACE GENERATOR PARTS
N806 N3-28 DO YOU TROUBLESHOOT AS FAN AS CHECKING WIRE
CONNECTIONS OF GENERATORS
N807 N3-29 DO YOU TROUBLESHOOT DOWN TO COMPONENT PARTS OF
GENERATORS

N N
METER MOVEMENTS, SATURABLE REACTORS,
MAGNETIC AMPLIFIERS, AND WAVESHAPEING CIRCUITS
N808 N1-01 DO YOU WORK WITH METERS IN YOUR PRESENT JOB
N809 N1-02 DO YOU CONCEPTUALIZE OR CONSIDER THE FUNCTIONS OF
PERMANENT MAGNETS
N810 N1-03 DO YOU CONCEPTUALIZE OR CONSIDER THE FUNCTIONS OF
MOVING COILS
N811 N1-04 DO YOU CONCEPTUALIZE OR CONSIDER THE FUNCTIONS OF
SPIRAL SPRINGS
N812 N1-05 DO YOU READ METER SCALES
N813 N1-06 DO YOU EXTEND THE RANGE OF AMMETERS
(EXPRESSED IN UNITS OF OHMS PER VOLT)
N814 N1-07 DO YOU ZERO OHMMETERS
N815 N1-08 DO YOU ZERO AMMETERS
N816 N1-09 DO YOU EXTEND THE RANGE OF VOLTMETERS
N817 N1-10 DO YOU USE OR REFER TO VOLTMETER SENSITIVITY
N818 N2-01 DO YOU WORK WITH SATURABLE REACTORS OR MAGNETIC
AMPLIFIERS IN YOUR PRESENT JOB
N819 N2-02 DO YOU INSPECT MAGNETIC AMPLIFIERS OR SATURABLE
REACTORS
N820 N2-03 DO YOU CLEAN MAGNETIC AMPLIFIERS OR SATURABLE
REACTORS
N821 N2-04 DO YOU ADJUST MAGNETIC AMPLIFIERS OR SATURABLE
REACTORS
N822 N2-05 DO YOU TROUBLESHOOT MAGNETIC AMPLIFIERS OR SATURABLE
REACTORS
N823 N2-06 DO YOU REMOVE OR REPLACE MAGNETIC AMPLIFIERS OR
SATURABLE REACTORS
N824 N2-07 DO YOU REMOVE OR REPLACE MAGNETIC AMPLIFIER OR
SATURABLE REACTOR COMPONENTS
N825 N2-08 DO YOU USE OR REFER TO HYSTERESIS CURVES OR LOOPS
N826 N2-09 DO YOU INTERPRET SCHEMATIC DRAWINGS TO DEVELOP OUTPUT
WAVEFORMS ACROSS REACTOR WINDINGS OR LOAD RESISTORS OF
SINGLE WINDING SATURABLE REACTORS
N827 N2-10 DO YOU MEASURE OUTPUT WAVEFORMS ACROSS REACTOR
WINDINGS OR LOAD RESISTORS OF SINGLE WINDING SATURABLE
REACTORS
N828 N2-11 DO YOU INTERPRET SCHEMATIC DRAWINGS TO DEVELOP OUTPUT
WAVEFORMS FOR MAGNETIC AMPLIFIERS
N829 N2-12 DO YOU USE OR REFER TO COERCIVE FORCE IN SATURABLE
GENERATORS

REACTORS

N830 N2-13 DO YOU USE OR REFER TO RESIDUAL MAGNETISM IN
SATURABLE REACTORS
N831 N2-14 DO YOU USE OR REFER TO FLUX DENSITY IN SATURABLE
REACTORS
N832 N2-15 DO YOU USE OR REFER TO POINT OF SATURATION IN
SATURABLE REACTORS
N833 N2-16 DO YOU USE OR REFER TO SATURABLE REACTOR SCHEMATIC
SYMBOLS
N834 N2-17 DO YOU WORK WITH WAVESHAPEING CIRCUITS IN YOUR PRESENT
JOB

N835 N3-02 DO YOU USE OR REFER TO TRANSIENT INTERVALS
N836 N3-03 DO YOU USE OR REFER TO PULSE WIDTH (PWT)
N837 N3-04 DO YOU USE OR REFER TO PULSE RECURRENT TIME (PRT)
N838 N3-05 DO YOU USE OR REFER TO PULSE RECURRENT FREQUENCY
(PWF)

N839 N3-06 DO YOU USE OR REFER TO DIFFERENTIATING CIRCUITS
N840 N3-07 DO YOU USE OR REFER TO INTEGRATING CIRCUITS
N841 N3-08 DO YOU USE OR REFER TO THE CLASSIFICATION OF TIME
CONSTANTS (LC) AS LONG, MEDIUM, OR SHORT
N842 N3-09 DO YOU DETERMINE WHETHER AN LR OR RC CIRCUIT IS
DIFFERENTIATING OR INTEGRATING BASED ON THE TIME CONSTANT
AND OUTPUT CONFIGURATION
N843 N3-10 DO YOU WORK WITH SQUARE WAVE GENERATORS
N844 N3-11 DO YOU WORK WITH RECTANGULAR WAVE GENERATORS

O SINGLE SIDEBAND SYSTEMS, PULSE MODULATION
SYSTEMS, AND ANTENNAS

N845 O1-01 DO YOU WORK ON SINGLE SIDEBAND SYSTEMS IN YOUR
PRESENT JOB

O846 O1-02 DO YOU INSPECT SSB TRANSMIT OR RECEIVE SYSTEMS
O847 O1-03 DO YOU CLEAN SSB TRANSMIT OR RECEIVE SYSTEMS
O848 O1-04 DO YOU ALIGN SSB TRANSMIT OR RECEIVE SYSTEMS
O849 O1-05 DO YOU TROUBLESHOOT TO SSB TRANSMIT OR RECEIVE
SYSTEMS

O850 O1-06 DO YOU TROUBLESHOOT TO SSB TRANSMIT OR RECEIVE
COMPONENTS

O851 O1-07 DO YOU REMOVE OR REPLACE SSB TRANSMIT OR RECEIVE
SISTERS

O852 O1-08 DO YOU REMOVE OR REPLACE SSB TRANSMIT OR RECEIVE
COMPONENTS

O853 O1-09 DO YOU PERFORM TASKS ON SSB AUDIO AMPLIFIERS
N854 O1-10 DO YOU PERFORM TASKS ON SSB BALANCED MODULATORS
N855 O1-11 DO YOU PERFORM TASKS ON SSB CARRIER OSCILLATORS
O856 O1-12 DO YOU PERFORM TASKS ON SSB LC FILTERS

O857 O1-13 DO YOU PERFORM TASKS ON SSB CRYSTAL FILTERS
O858 O1-14 DO YOU PERFORM TASKS ON SSB MECHANICAL FILTERS
O859 O1-15 DO YOU PERFORM TASKS ON SSB OSCILLATORS
O860 O1-16 DO YOU PERFORM TASKS ON SSB MIXERS
O861 O1-17 DO YOU PERFORM TASKS ON SSB DRIVERS
O862 O1-18 DO YOU PERFORM TASKS ON SSB POWER AMPLIFIERS

0863 01=19 DO YOU PERFORM TASKS ON SSB RF AMPLIFIERS	0896 02=22 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM RF
0864 01=20 DO YOU PERFORM TASKS ON SSB FREQUENCY CONVERTERS	0897 02=23 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM
0865 01=21 DO YOU PERFORM TASKS ON SSB IF AMPLIFIERS	0898 02=24 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM
0366 01=22 DO YOU PERFORM TASKS ON SSB DEMODULATORS	0899 IF AMPLIFIERS
0367 01=23 DO YOU PERFORM TASKS ON SSB DON'T REMEMBER WHICH SSB SYSTEM STAGES	02=25 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM
0868 01=24 DO YOU USE OR REFER TO SELECTIVE FADING	02=26 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM
0869 01=25 DO YOU USE OR REFER TO PEAK POWER	02=27 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM
0870 01=26 DO YOU USE OR REFER TO FREQUENCY STABILITY	02=28 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM
0871 01=27 DO YOU USE OR REFER TO RESPONSE CURVES FOR SAWWTOOTH FILTERS	DON'T REMEMBER WHICH PULSE MODULATION SYSTEM STAGES
0872 01=28 DO YOU CALCULATE PEAK POWER OR EFFECTIVE POWER OF SSB TRANSMITTERS	02=29 DO YOU USE OR REFER TO PULSE RECURRENCE FREQUENCY (PRF)
0873 01=29 DO YOU TRACE SIGNALS ON CURRENT PATHS THROUGH SSB TRANSMITTER SCHEMATIC DIAGRAMS	0904 02=30 DO YOU USE OR REFER TO PULSE RECURRENCE TIME (PRF)
0874 01=30 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH SSB RECEIVER SCHEMATIC DIAGRAMS	0905 02=31 DO YOU USE OR REFER TO PULSE WIDTH (PW)
0875 02=01 DO YOU WORK ON PULSE MODULATION SYSTEMS IN YOUR PRESENT JOB	0906 02=32 DO YOU USE OR REFER TO PULSE SHAPE
0876 02=02 DO YOU INSPECT PULSE MODULATION SYSTEMS	0907 02=33 DO YOU USE OR REFER TO PEAK POWER
0877 02=03 DO YOU CLEAN PULSE MODULATION SYSTEMS	0908 02=34 DO YOU USE OR REFER TO AVERAGE POWER
0878 02=04 DO YOU ALIGN PULSE MODULATION SYSTEMS	0909 02=35 DO YOU CALCULATE PULSE RECURRENCE TIME (PRF) OR PULSE RECURRENCE FREQUENCY (PRF)
0879 02=05 DO YOU TROUBLESHOOT TO PULSE MODULATION SYSTEMS	0910 02=36 DO YOU MEASURE PULSE RECURRENCE TIME (PRF) OR PULSE RECURRENCE FREQUENCY (PRF)
0880 02=06 DO YOU TROUBLESHOOT TO PULSE MODULATION SYSTEM COMPONENTS	0911 02=37 DO YOU USE FORMULAS TO CALCULATE AVERAGE POWER OR PEAK POWER OF PULSE MODULATION TRANSMIT SYSTEMS
0881 02=07 DO YOU REMOVE OR REPLACE PULSE MODULATION SYSTEMS	0912 02=38 DO YOU TRACE SIGNALS OR CURRENT PATHS THROUGH PULSE MODULATION TRANSMITTER SCHEMATIC DIAGRAMS
0882 02=08 DO YOU REMOVE OR REPLACE PULSE MODULATION SYSTEMS	0913 02=39 DO YOU WORK WITH ANTENNAS IN YOUR PRESENT JOB
0883 02=09 DO YOU WORK ON PULSE AMPLITUDE MODULATION (PAM)	0914 03=01 DO YOU INSPECT ANTENNAS
0884 02=10 DO YOU WORK ON PULSE-DURATION MODULATION (PCM)	0915 03=02 DO YOU SLEIGH ANTENNAS
0885 02=11 DO YOU WORK ON PULSE-POSITION MODULATION (PPM)	0916 03=03 DO YOU TROUBLESHOOT TO ANTENNA COMPONENTS
0886 02=12 DO YOU WORK ON PULSE-CODE MODULATION (PCM) SYSTEMS	0917 03=04 DO YOU PHYSICALLY ALIGN ANTENNAS
0887 02=13 DO YOU WORK ON LINE PULSING MODULATION SYSTEMS	0918 03=05 DO YOU ELECTRICALLY ALIGN ANTENNAS
0888 02=14 DO YOU WORK ON DON'T REMEMBER WHICH TYPE OF MODULATION SYSTEM	0919 03=06 DO YOU TROUBLESHOOT TO ANTENNA
0889 02=15 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM POWER SUPPLIES	0920 03=07 DO YOU TROUBLESHOOT TO ANTENNA
0890 02=16 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM CHARGING CHOKES AND CHARGING DIODES	0921 03=08 DO YOU REMOVE OR INSTALL ANTENNAS
0891 02=17 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM PULSE FORMING NETWORKS	0922 03=09 DO YOU REMOVE OR REPLACE COMPONENTS OF ANTENNAS
0892 02=18 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM TIMERS	0923 03=10 DO YOU USE OR REFER TO TECHNICAL DATA CONTAINING REPRESENTATIONS OF E OR MAGNETIC FIELD LINES
0893 02=19 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM SWITCHES SUCH AS GAS TURBINES	0924 03=11 DO YOU USE OR REFER TO TECHNICAL DATA CONTAINING REPRESENTATIONS OF H OR MAGNETIC FIELD LINES
0894 02=20 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM PULSE TRANSFORMERS	0925 03=12 DO YOU DETERMINE THE DIRECTION OF THE MAGNETIC LINES IN RELATION TO THE ELECTRIC LINES OF FORCE FOR ANTENNAS
0895 02=21 DO YOU PERFORM TASKS ON PULSE MODULATION SYSTEM TRANSMITTER TUBES	0926 03=13 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE OF CORRECT LENGTH (HALF-WAVE) ACT AS INDUCTIVE LOADS TO THE GENERATOR WHICH ARE LONGER THAN A HALF-WAVE ACT AS INDUCTIVE LOADS TO THE GENERATOR

0928 03-15 DO YOU USE OR REFER TO THE GENERAL RULE THAT ANTENNAS WHICH ARE SHORTER THAN A HALF-WAVE LENGTH AS CAPACITIVE LOADS TO THE GENERATOR
 0929 03-16 DO YOU WORK WITH HERTZ ANTENNAS
 0930 03-17 DO YOU WORK WITH MARCONI ANTENNAS
 0931 03-18 DO YOU WORK WITH BROADSIDED ARRAYS
 0932 03-19 DO YOU WORK WITH END-FIRE ARRAYS
 0933 03-20 DO YOU WORK WITH CARDIOD ARRAYS
 0934 03-21 DO YOU WORK WITH COLLINEAR ARRAYS
 0935 03-22 DO YOU USE OR REFER TO THE TERM ELECTROMAGNETIC INDUCTION FIELDS WHEN WORKING WITH ANTENNAS
 0936 03-23 DO YOU MEASURE ELECTROMAGNETIC INDUCTION FIELDS OF ANTENNAS
 0937 03-24 DO YOU USE OR REFER TO THE TERM ELECTROMAGNETIC RADIATION FIELDS WHEN WORKING WITH ANTENNAS
 0938 03-25 DO YOU MEASURE ELECTROMAGNETIC RADIATION FIELDS OF ANTENNAS

0939 03-26 DO YOU USE OR REFER TO THE TIME PHASE OF ELECTRIC (E) AND MAGNETIC (H) COMPONENTS IN ANTENNA RADIATION
 0940 03-27 DO YOU USE OR REFER TO THE TIME PHASE OF ELECTRIC (E) AND MAGNETIC (H) COMPONENTS IN ANTENNA INDUCTION FIELD
 0941 03-28 ARE ANY OF THE ANTENNAS YOU WORK ON LINEARLY POLARIZED
 0942 03-29 ARE ANY OF THE ANTENNAS YOU WORK ON CIRCULARLY POLARIZED
 0943 03-30 DO YOU MEASURE OR DETERMINE THE POLARITY OF ANTENNAS YOU WORK ON
 0944 03-31 DO YOU CONSTRUCT OR MAKE THE CALCULATIONS NECESSARY TO CONSTRUCT ANTENNAS OF CORRECT LENGTH FOR SPECIFIC WAVELENGTHS
 0945 03-32 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS
 0946 03-33 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS SERVING AS DIRECTORS
 0947 03-34 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN PARASITIC ELEMENTS SERVING AS RELECTORS
 0948 03-35 DO THE ANTENNA ARRAYS YOU WORK WITH CONTAIN DON'T REMEMBER WHAT KIND OF ELEMENTS
 0949 03-36 DO YOU WORK ON UNIDIRECTIONAL ANTENNAS
 0950 03-37 DO YOU WORK ON BIDIRECTIONAL ANTENNAS
 0951 03-38 DO YOU WORK ON DON'T REMEMBER THE DIRECTIONALITY
 0952 03-39 DO YOU WORK WITH ROTAR ANTENNA ARRAYS

P TRANSMISSION LINES, WAVEGUIDES AND CAVITY RESONATORS, AND MICROWAVE AMPLIFIERS AND OSCILLATORS

P953 PI-01 IN YOUR PRESENT JOB DO YOU WORK WITH TRANSMISSION LINES (TRANSMISSION LINES ARE DEFINED TO INCLUDE LEADS BETWEEN RECEIVERS AND ANTENNAS, TELEPHONE LEADS, AS WELL AS HIGH VOLTAGE POWER LINES, ETC. DO NOT CONSIDER WAVEGUIDES AS TRANSMISSION LINES)

P954 PI-02 DO YOU REFER TO OR USE COPPER LOSS OR IZR LOSS IN TRANSMISSION LINES

P955 PI-03 DO YOU REFER TO OR USE SKIN EFFECTS OF HIGH FREQUENCY CURRENTS IN TRANSMISSION LINES

P956 PI-04 DO YOU REFER TO OR USE RADIATION LOSS IN TRANSMISSION LINES

P957 PI-05 DO YOU USE OR REFER TO DIELECTRIC LOSS IN TRANSMISSION LINES

P958 PI-06 DO YOU USE OR REFER TO LEAKAGE LOSSES IN TRANSMISSION LINES

P959 PI-07 DO YOU WORK WITH TWISTED PAIR TRANSMISSION LINES

P960 PI-08 DO YOU WORK WITH TWIN LEAD TRANSMISSION LINES

P961 PI-09 DO YOU WORK WITH OPEN TWO-WIRE TRANSMISSION LINES

P962 PI-10 DO YOU WORK WITH FLEXIBLE COAXIAL CABLE TRANSMISSION LINES

P963 PI-11 DO YOU WORK WITH RIGID COAXIAL CABLE TRANSMISSION LINES

P964 PI-12 DO YOU TROUBLESHOOT TRANSMISSION LINES

P965 PI-13 DO YOU ANALYZE VOLTAGE OR CURRENT WAVEFORMS IN TRANSMISSION LINES TO DETERMINE THE TYPE OF TERMINATION (OPEN, SHORTED, CAPACITIVE, INDUCTIVE)

P966 PI-14 DO YOU SELECT APPROPRIATE TRANSMISSION LINES TERMINATIONS TO ACHIEVE DESIRED WAVEFORMS

P967 PI-15 DO YOU USE OR REFER TO SCHEMATIC SYMBOLS FOR LINE TERMINATIONS IN TERMS OF CIRCUIT TERMINATIONS

P968 PI-16 DO YOU MEASURE STANDING WAVE RATIOS (SWR) OF TRANSMISSION LINES

P969 PI-17 DO YOU CALCULATE STANDING WAVE RATIOS (SWR) OF TRANSMISSION LINES

P970 PI-18 DO YOU PERFORM THE CALCULATIONS NECESSARY TO DETERMINE THE IMPEDANCE AND LENGTH OF QUARTER - WAVELENGTH MATCHING TRANSFORMERS TO MATCH TRANSMISSION LINES TO LOADS

P971 PI-19 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING MATCHING TRANSFORMERS

P972 PI-20 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING DELTA MATCHING

P973 PI-21 DO YOU SELECT THE TYPE OF TRANSMISSION LINE NEEDED FOR PARTICULAR JOBS WITHOUT REFERRING TO TECHNICAL DATA

P974 PI-22 DO YOU USE OR REFER TO THE TERM CHARACTERISTIC IMPEDANCE (ZO) OF TRANSMISSION LINES

P975 PI-23 DO YOU CALCULATE THE CHARACTERISTIC IMPEDANCE (ZO) OF TRANSMISSION LINES

P976 PI-24 DO YOU USE OR REFER TO THE TERM CUT-OFF FREQUENCY OF TRANSMISSION LINES

P977 PI-25 DO YOU USE OR REFER TO THE TERM VELOCITY FACTOR (K) OF TRANSMISSION LINES

P978 PI-26 DO YOU COMPUTE THE ELECTRICAL LENGTH OF TRANSMISSION LINES FOR PARTICULAR FREQUENCIES

P979 PI-27 DO YOU CONSTRUCT TRANSMISSION LINES OF PARTICULAR ELECTRICAL LENGTH FOR GIVEN FREQUENCIES

P980 PI-28 DO YOU USE OR REFER TO THE GENERAL RULE THAT AS THE FREQUENCY INCREASES AND THE PHYSICAL LENGTH OF TRANSMISSION LINES REMAIN CONSTANT, THE ELECTRICAL LENGTH

P981 P1=29 DO YOU WORK WITH NONRESONANT (FLAT) TRANSMISSION LINES
P982 P1=30 DO YOU WORK WITH RESONANT TRANSMISSION LINES
P983 P1=31 DO YOU WORK WITH TRANSMISSION LINES WHICH ARE MATCHED TO LOADS USING STUB MATCHING
P984 P2=01 DO YOU WORK WITH WAVEGUIDES OR CAVITY RESONATORS IN YOUR PRESENT JOB
P985 P2=02 DO YOU INSPECT WAVEGUIDES OR CAVITY RESONATORS
P986 P2=03 DO YOU CLEAN WAVEGUIDES OR CAVITY RESONATORS
P987 P2=04 DO YOU BEND WAVEGUIDES OR CAVITY RESONATORS
P988 P2=05 DO YOU TWIST WAVEGUIDES OR CAVITY RESONATORS
P989 P2=06 DO YOU PRESSURIZE WAVEGUIDES OR CAVITY RESONATORS
P990 P2=07 DO YOU PURGE WAVEGUIDES OR CAVITY RESONATORS
P991 P2=08 DO YOU TROUBLESHOOT WAVEGUIDES OR CAVITY RESONATORS
P992 P2=09 DO YOU REMOVE OR INSTALL COMPLETE WAVEGUIDE SECTIONS
P993 P2=10 DO YOU REMOVE OR INSTALL DUMMY LOADS
P994 P2=11 DO YOU REMOVE OR INSTALL E BENDS
P995 P2=12 DO YOU REMOVE OR INSTALL E BENDS
P996 P2=13 DO YOU REMOVE OR INSTALL H BENDS
P997 P2=14 DO YOU REMOVE OR INSTALL OTHER BENDS
P998 P2=15 DO YOU REMOVE OR INSTALL CHOKE JOINTS
P999 P2=16 DO YOU REMOVE OR INSTALL ROTATING JOINTS
P000 P2=17 DO YOU REMOVE OR INSTALL DIRECTIONAL COUPLERS
P001 P2=18 DO YOU REMOVE OR INSTALL BI-DIRECTIONAL COUPLERS
P002 P2=19 DO YOU USE OR REFER TO "A" WALL OF WAVEGUIDES
P003 P2=20 DO YOU USE OR REFER TO "B" WALL OF WAVEGUIDES
P004 P2=21 DO YOU USE OR REFER TO CUTOFF FREQUENCY OF WAVEGUIDES
P005 P2=22 DO YOU USE OR REFER TO FREQUENCY DETERMINING WALL OF WAVEGUIDES
P006 P2=23 DO YOU USE OR REFER TO POWER-DETERMINING WALL OF WAVEGUIDES
P007 P2=24 DO YOU USE OR REFER TO ELECTRIC FIELD BOUNDARY CONDITIONS
P008 P2=25 DO YOU USE OR REFER TO MAGNETIC FIELD BOUNDARY CONDITIONS
P009 P2=26 DO YOU USE OR REFER TO DULPFIXER FIELD BOUNDARY CONDITIONS
P010 P2=27 DO YOU USE OR REFER TO THE GENERAL RULE THAT MOST WAVEGUIDES ARE MADE WITH A WALL SIZE OF .7 WAVELENGTHS OF THE OPERATING FREQUENCY
P011 P2=28 DO YOU USE OR REFER TO THE GENERAL RULE THAT MOST "A" WALLS RANGE FROM .2 TO .5 WAVELENGTHS IN SIZE, WITH .35 USED AS AN AVERAGE
P012 P2=29 ARE YOU CONCERNED WITH THE MATERIAL (SUCH AS BRASS) WHICH WAVEGUIDES ARE MADE OF
P013 P2=30 DO YOU COMPUTE THE LENGTH OF A WAVEGUIDE FOR SPECIFIC INSTALLATION
P014 P2=31 DO YOU USE THE RIGHT HAND RULE TO DETERMINE THE DIRECTION OF PROPAGATION, DIRECTION OF "E" FIELD, OR DIRECTION OF "H" FIELD IN WAVEGUIDES
P015 P2=32 DO YOU USE OR REFER TO THE TIME PHASE OF PEAK "E" OR

P016 P2=33 DO YOU MEASURE THE TIME PHASE OF "E" OR "H" LINES IN WAVEGUIDES
P017 P2=34 DO YOU USE OR REFER TO THE SPACE QUADRATURE OF "E" OR "H" LINES IN WAVEGUIDES
P018 P2=35 ARE HIGH POWER PROBES USED ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH
P019 P2=36 ARE LOW POWER PROBES USED ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH
P020 P2=37 ARE LOOPS USED ON WAVEGUIDES OR CAVITY RESONATORS
P021 P2=38 ARE APERTURES (WINDOWS OR IRISSES) USED ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH
P022 P2=39 ARE DON'T REMEMBER THE KIND OF ENERGY COUPLING USED ON WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH
P023 P2=40 DO YOU DETERMINE WHERE PROBES SHOULD BE MOUNTED IN WAVEGUIDES OR CAVITY RESONATORS WITHOUT REFERRING TO TECHNICAL DATA
P024 P2=41 DO YOU DETERMINE THE POSITIONING OF LOOPS IN WAVEGUIDES OR CAVITY RESONATORS WITHOUT REFERRING TO TECHNICAL DATA
P025 P2=42 DO YOU DETERMINE THE POSITIONING OR SIZE OF APERTURES IN WAVEGUIDES OR CAVITY RESONATORS WITHOUT REFERRING TO TECHNICAL DATA
P026 P2=43 ARE CHOKE JOINTS USED IN WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH
P027 P2=44 ARE ROTATING JOINTS USED IN WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH
P028 P2=45 ARE DON'T REMEMBER THE KIND OF JOINTS USED IN WAVEGUIDES OR CAVITY RESONATORS YOU WORK WITH
P029 P2=46 DO YOU TUNE CAVITY RESONATORS USING CAPACITIVE TUNING
P030 P2=47 DO YOU TUNE CAVITY RESONATORS USING INDUCTIVE TUNING
P031 P2=48 DO YOU TUNE CAVITY RESONATORS USING VOLUME TUNING
P032 P2=49 DO YOU TUNE CAVITY RESONATORS USING DON'T REMEMBER THE METHOD OF TUNING
P033 P2=50 DO YOU MEASURE THE FREQUENCY OF SIGNALS IN CAVITY RESONATORS
P034 P3=01 IN YOUR PRESENT JOB DO YOU WORK WITH KLYSTRONS, TRAVELING WAVE TUBES (TWT), PARAMETRIC AMPLIFIERS, OR MAGNETRONS
P035 P3=02 DO YOU USE OR REFER TO INTERELECTRODE CAPACITANCE
P036 P3=03 DO YOU USE OR REFER TO ELECTRON TRANSIT TIME
P037 P3=04 DO YOU USE OR REFER TO LEAD INDUCTANCE
P038 P3=05 DO YOU USE OR REFER TO RF LOSSES IN EXTERNAL CIRCUITRY
P039 P3=06 DO YOU USE OR REFER TO PRINCIPLE OF ELECTRON VELOCITY MODULATION
P040 P3=07 DO YOU USE OR REFER TO ELECTRON BUNCHING
P041 P3=08 DO YOU WORK WITH TWO-CAVITY KLYSTRONS
P042 P3=09 DO YOU WORK WITH THREE-CAVITY KLYSTRONS
P043 P3=10 DO YOU WORK WITH REFLEX KLYSTRONS
P044 P3=11 DO YOU WORK WITH TRAVELING-WAVE TUBES (TWT)

P044	P3-13 DO YOU WORK WITH UP-CONVERTER PARAMETRIC AMPLIFIERS	P082 P3-49 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON GRIDS
P047	P3-14 DO YOU WORK WITH MAGNETRONS	P083 P3-50 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON GRID CAVITY GAPS
P048	P3-15 DO YOU INSPECT KLYSTRONS OR TWT	P084 P3-51 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON RESONANT CAVITIES
P049	P3-16 DO YOU CLEAN KLYSTRONS OR TWT	P085 P3-52 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON MAGNETIC COUPLING LOOPS
P050	P3-17 DO YOU TUNE KLYSTRONS OR TWT ELECTRICALLY	P086 P3-53 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON FILAMENTS
P051	P3-18 DO YOU TUNE KLYSTRONS OR TWT MECHANICALLY	
P052	P3-19 DO YOU PERFORM OPERATIONAL CHECKS OF KLYSTRONS OR TWT	
P053	P3-20 DO YOU TROUBLESHOOT KLYSTRONS OR TWT	P087 P3-54 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON CATHODES
P054	P3-21 DO YOU REMOVE OR REPLACE COMPLETE KLYSTRON OR TWT	P088 P3-55 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF REFLEX KLYSTRON OUTPUT LEADS
P055	P3-22 DO YOU INSPECT PARAMETRIC AMPLIFIERS	P089 P3-56 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES FILAMENTS
P056	P3-23 DO YOU CLEAN PARAMETRIC AMPLIFIERS	P090 P3-57 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES CATHODES
P057	P3-24 DO YOU ADJUST PARAMETRIC AMPLIFIERS	P091 P3-58 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES MODULATOR GRIDS
P058	P3-25 DO YOU ADJUST PARAMETRIC AMPLIFIERS	P092 P3-59 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES ANODES
P059	P3-26 DO YOU TUNE PARAMETRIC AMPLIFIERS	P093 P3-60 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES HELIXES
P060	P3-27 DO YOU PERFORM OPERATIONAL CHECKS OF PARAMETRIC AMPLIFIERS	P094 P3-61 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES COLLECTORS
P061	P3-28 DO YOU TROUBLESHOOT PARAMETRIC AMPLIFIERS	P095 P3-62 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES MAGNETS
P062	P3-29 DO YOU REMOVE OR REPLACE COMPLETE PARAMETRIC AMPLIFIERS	P096 P3-63 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TRAVELING-WAVE TUBES ATTENATORS
P063	P3-30 DO YOU REMOVE OR REPLACE PARAMETRIC AMPLIFIER COMPONENTS	P097 P3-64 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER FERRITE CIRCULATORS
P064	P3-31 DO YOU INSPECT MAGNETRONS	P098 P3-65 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER SIGNAL CAVITIES
P065	P3-32 DO YOU CLEAN MAGNETRONS	P099 P3-66 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER ISOLATORS
P066	P3-33 DO YOU ADJUST MAGNETRONS	P100 P3-67 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER VARACTOR DIODES
P067	P3-34 DO YOU TUNE MAGNETRONS	P101 P3-68 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER FERRITE ISOLATORS
P068	P3-35 DO YOU PERFORM OPERATIONAL CHECKS OF MAGNETRONS	P102 P3-69 DO YOU PERFORM TASKS ON PARAMETRIC AMPLIFIER REVERSE-THREE-CAVITY KLYSTRONS
P069	P3-36 DO YOU TROUBLESHOOT MAGNETRONS	P103 P3-70 DO YOU PERFORM TASKS ON ANODES
P070	P3-37 DO YOU REMOVE OR REPLACE COMPLETE MAGNETRON	P104 P3-71 DO YOU PERFORM TASKS ON ANODE COOLING PINS
P071	P3-38 DO YOU REMOVE OR REPLACE MAGNETRON COMPONENTS	P105 P3-72 DO YOU PERFORM TASKS ON COUPLING LOOPS
P072	P3-39 DO YOU USE OR REFER TO THE OPERATING PRINCIPLES OF TWO-CAVITY KLYSTRONS COLLECTOR PLATES	P106 P3-73 DO YOU PERFORM TASKS ON HEATER LEADS
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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) This report summarizes the results of an Electronics Principles survey of Missile Maintenance personnel assigned overseas and supplements the EPI report for the Missile Maintenance career ladder (AFPT 90-316-222, dated 5 November 1976) which was restricted to a selected sample of CONUS personnel. This report gives a detailed listing of the technical tasks and knowledge needed to perform the jobs within the specialty or career ladder.		

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2 This specialty has the following functions:

Performs maintenance on missile and Remotely Piloted Vehicle (RPV) guidance and control systems, subsystems, and components; operates, calibrates, and maintains related test, monitoring, and checkout equipment; performs malfunction analysis, and repairs, maintains, modifies, inspects, and services missile and RPV systems, subsystems, and ground operating equipment to component level; performs field maintenance on electronic test, launch control, checkout, and related ground support equipment used by missile activities; and assembles and disassembles missiles and RPVs.

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